<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-003 International Building Code. The ((2009)) 2012 edition of the *International Building Code*, including Appendix E, published by the International Code Council is hereby adopted by reference with the exceptions noted in this chapter of the Washington Administrative Code.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-005 International Building Code requirements for barrier-free accessibility. Chapter 11 and other International Building Code requirements for barrier-free access, including ICC (( $\frac{A117.1-2003}{A117.1-2009}$ ))  $\frac{A117.1-2009}{A117.1-2009}$  and Appendix E, are adopted pursuant to chapters 70.92 and 19.27 RCW.

Pursuant to RCW 19.27.040, Chapter 11 and requirements affecting barrier-free access shall not be amended by local governments.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

 $W\!AC$  51--50--007 Exceptions. The exceptions and amendments to the International Building Code contained in the provisions of chapter 19.27 RCW shall apply in case of conflict with any of the provisions of these rules.

The provisions of this code do not apply to temporary growing structures used solely for the commercial production of horticultural plants including ornamental plants, flowers, vegetables, and fruits. "Temporary growing structure" means a structure that has the sides and roof covered with polyethylene, polyvinyl, or similar flexible synthetic material and is used to provide plants with either frost protection or increased heat retention. A temporary growing structure is not considered a building for purposes of this code.

The provisions of this code do not apply to the construction, alteration, or repair of temporary worker housing except as

provided by rule adopted under chapter 70.114A RCW or chapter 37, Laws of 1998 (SB 6168). "Temporary worker housing" means a place, area, or piece of land where sleeping places or housing sites are provided by an employer for his or her employees or by another person, including a temporary worker housing operator, who is providing such accommodations for employees, for temporary, seasonal occupancy, and includes "labor camps" under RCW 70.54.110.

Codes referenced which are not adopted through RCW 19.27.031 or chapter 19.27A RCW shall not apply unless specifically adopted by the authority having jurisdiction. The ((2009)) 2012 International Existing Building Code is included in the adoption of this code in Section 3401.5 and amended in WAC 51-50-480000.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

**WAC 51-50-008 Implementation.** The International Building Code adopted under chapter 51-50 WAC shall become effective in all counties and cities of this state on July 1, ((2010)) 2013.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0200 Chapter 2--Definitions.

#### SECTION 202--DEFINITIONS.

ADULT FAMILY HOME. ((See Section 310.2.)) A dwelling, licensed by Washington state, in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not related by blood or marriage to the person or persons providing the services.

((ATR-PERMEABLE)) AIR-IMPERMEABLE INSULATION. An insulation having an air permeance equal to or less than  $0.02~\rm L/s-m^2$  at 75 Pa pressure differential tested in accordance with ASTM E2178 or ASTM E283.

CHILD  $((\frac{DAY}{}))$  CARE.  $((\frac{See\ Section\ 310.2.}{}))$  The care of children during any period of a 24-hour day.

CHILD ((DAY)) CARE ((HOME)), FAMILY HOME. ((See Section 310.2.)) A child care facility, licensed by Washington state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of twelve or fewer children, including children who reside at the home.

HOSPICE CARE CENTER. A building or portion thereof used on a 24-hour

basis for the provision of hospice services to terminally ill inpatients.

NIGHTCLUB. An A-2 Occupancy use under the 2006 International Building Code in which the aggregate area of concentrated use of unfixed chairs and standing space that is specifically designated and primarily used for dancing or viewing performers exceeds three hundred fifty square feet, excluding adjacent lobby areas. "Nightclub" does not include theaters with fixed seating, banquet halls, or lodge halls.

NONSTRUCTURAL CONCRETE. Any element made of plain or reinforced concrete that is not part of a structural system required to transfer either gravity or lateral loads to the ground.

PORTABLE SCHOOL CLASSROOM. ((See Section 902.1.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. See Section 310.2. This definition is not adopted.)) A structure, transportable in one or more sections, which requires a chassis to be transported, and is designed to be used as an educational space with or without a permanent foundation. The structure shall be trailerable and capable of being demounted and relocated to other locations as needs arise.

<u>SMALL BUSINESS</u>. Any business entity (including a sole proprietorship, corporation, partnership or other legal entity) which is owned and operated independently from all other businesses, which has the purpose of making a profit, and which has fifty or fewer employees.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0305 Section 305--Educational Group E.

((305.2 Day Care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2 1/2 years of age, shall be classified as a Group E Occupancy.

EXCEPTION: Family child day care homes licensed by Washington state for the care of twelve or fewer children shall be classified as Group R-3.))

305.2.4 Family home child care. Family home child care licensed by Washington state for the care of twelve or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

## WAC 51-50-0308 Section 308--Institutional Group I.

((308.1 Institutional Group I. Institutional Group I Occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Residential board and care facilities

Assisted living facilities

Halfway houses

Group homes

Congregate care facilities

Social rehabilitation facilities

Alcohol and drug centers

Convalescent facilities

A facility such as the above with five or fewer persons and adult family homes licensed by Washington state shall be classified as a Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

A facility such as the above, providing licensed care to clients in one of the categories listed in Section 310.1 licensed by Washington state shall be classified as Group R-2.

308.3)) <u>308.2 Definitions.</u> The following terms are defined in Chapter 2:

#### 24-HOUR CARE.

Custodial Care.

Detoxification Facilities.

Foster Care Facilities.

## HOSPICE CARE CENTER.

Hospitals and psychiatric hospitals.

Incapable of self-preservation.

Medical care.

Nursing homes.

308.3.2 Licensed care facilities. Assisted living facilities as licensed by Washington state under chapter 388-78A WAC and residential treatment facilities as licensed by Washington state under chapter 246-337 WAC shall be classified as Group R-2.

- 308.3.3 Adult family homes. Adult family homes licensed by Washington state shall be classified as Group R-3 or shall comply with the International Residential Code.
- 308.4 Group I-2. This occupancy shall include buildings and structures used for medical((, surgical, psychiatric, nursing or custodial care for)) care on a 24-hour basis for more than five persons who are ((not capable)) incapable of self-preservation. This group shall include, but not be limited to, the following:

((Child)) Foster care facilities.

Detoxification facilities.

Hospice care centers.

Hospitals.

((Mental hospitals))

Nursing homes.

Psychiatric hospitals.

((A facility such as the above providing licensed care to clients in one of the categories listed in Section 310.1 licensed by Washington state shall be classified as Group R-2.

308.3.1 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

CHILD CARE FACILITIES. Facilities that provide care on a 24-hour basis to more than five children, 2 1/2 years of age or less, shall be classified as Group I-2.

peroxification Facility. Facilities that serve patients who are provided treatment for substance abuse on a 24-hour basis and who are incapable of self-preservation or who are harmful to themselves or others.

HOSPITALS AND MENTAL HOSPITALS. A building or portion thereof used on a 24-hour basis for the medical, psychiatric, obstetrical or surgical treatment of inpatients who are incapable of self-preservation.

Nursing homes are long-term care facilities on a 24-hour basis, including both intermediate care facilities and skilled nursing facilities, serving more than five persons and any of the persons are incapable of self-preservation.

HOSPICE CARE CENTER. A building or portion thereof used on a 24 hour basis for the provision of hospice services to terminally ill inpatients.

308.5.2 Child care facility. A facility that provides supervision and personal care on a less than 24-hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.

**EXCEPTIONS:** 

1. A child day care facility that provides care for more than five but no more than 100 children 2 1/2 years or less of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

2. Family child day care homes licensed by Washington state for the care of twelve or fewer children shall be classified as Group R-3.))

308.4.2 Licensed care facilities. Assisted living facilities as

<u>licensed</u> by Washington state under chapter 388-78A WAC and residential treatment facilities as licensed by Washington state under chapter 246-337 WAC shall be classified as Group R-2.

308.6.5 Family home child care. Family home child care licensed by Washington state for the care of twelve or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0310 Section 310--Residential Group R.

((310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code in accordance with Section 101.2. Residential occupancies shall include the following:

R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient)

Hotels (transient)

Motels (transient)

Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.))

310.2 Definitions. The following terms are defined in Chapter 2:
ADULT FAMILY HOME.

BOARDING HOUSE.

CHILD CARE.

CHILD CARE, FAMILY HOME.

CONGREGATE LIVING FACILITIES.

DORMITORY.

GROUP HOME.

PERSONAL CARE SERVICE.

TRANSIENT.

<u>310.4 Residential Group</u> R-2. Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Assisted living facilities as licensed by Washington state under chapter 388-78A WAC

Boarding houses ((( $not\ transient$ )) nontransient) with more than 16 occupants

((Boarding homes as licensed by Washington state under chapter

388 - 78A WAC))

<u>Congregate living facilities (nontransient) with more than 16 occupants</u>

Convents

Dormitories

Fraternities and sororities

Hotels (nontransient)

Live/work units

Monasteries

Motels (nontransient)

Residential treatment facilities as licensed by Washington state under chapter  $246-337~\mathrm{WAC}$ 

Vacation timeshare properties

((Congregate living facilities with sixteen or fewer occupants are permitted to comply with the construction requirements for  $\frac{1}{2}$ 

R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units. Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.

Congregate living facilities with sixteen or fewer persons.

Adult care within a single-family home, adult family homes and family child day care homes are permitted to comply with the International Residential Code.

Foster family care homes licensed by Washington state are permitted to comply with the *International Residential Code*, as an accessory use to a dwelling, for six or fewer children including those of the resident family.))

- 310.5.2 Adult family homes, family home child care. Adult family homes and family home child care facilities that are within a single-family home are permitted to comply with the *International Residential Code*.
- 310.5.3 Foster family care homes. Foster family care homes licensed by Washington state are permitted to comply with the International Residential Code, as an accessory use to a dwelling, for six or fewer children including those of the resident family.

 $\ensuremath{\text{R-4}}$  classification is not adopted. Any reference in this code to  $\ensuremath{\text{R-4}}$  does not apply.

((310.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

ADULT FAMILY HOME. A dwelling, licensed by Washington state, in which a person or persons provide personal care, special care, room and board to more than one but not more than six adults who are not

related by blood or marriage to the person or persons providing the services.

**BOARDING HOUSE.** A building arranged or used for lodging for compensation, with or without meals, and not occupied as a single family unit.

child day care. For the purposes of these regulations, is the care of children during any period of a 24-hour day.

CHILD DAY CARE HOME, FAMILY. A child day care facility, licensed by Washington state, located in the dwelling of the person or persons under whose direct care and supervision the child is placed, for the care of twelve or fewer children, including children who reside at the home.

congregate Living Facilities. A building or part thereof that contains sleeping units where residents share bathroom and/or kitchen facilities.

pormitory. A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

PERSONAL CARE SERVICE. The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for safety of the resident while inside the building.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. This definition is not adopted.

**TRANSIENT.** Occupancy of a dwelling or sleeping unit for not more than 30 days.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-0403 Section 403--High-rise buildings.

**403.5.4 Smokeproof exit enclosures**. Every required exit stairway serving floors more than 75 feet (22,860 mm) above the lowest level of fire department vehicle access shall ((comply)) be a smokeproof enclosure in accordance with Sections 909.20 and ((1022.9)) 1022.10.

EXCEPTION:

Unless required by other sections of this code, portions of such stairways which extend to serve floors below the level of exit discharge need not comply with Sections 909.20 and ((<del>1022.9</del>)) <u>1022.10</u> provided the portion of the stairway below is separated from the level of exit discharge with a 1 hour fire barrier.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-0407 ((Reserved.)) Group I-2.

407.4.3.2 Separation. Care suites shall be separated from other portions of the building by a smoke partition complying with Section 710. Partitions within suites are not required to be smoke resistant or fire resistance rated unless required by another section of this code.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-0420 Section 420--Groups I-1, R-1, R-2, R-3.

- ((420.4))  $\underline{420.6}$  Subdivision of building spaces—Smoke barriers. Smoke barriers complying with Section ((710))  $\underline{709}$  shall be installed on  $\underline{all}$  floors ((other than the level of exit discharge)) of a Group R-2 boarding home or residential treatment facility licensed by Washington state((, where a fire-resistance rated corridor is required by Table 1018.1)). The smoke barrier shall subdivide the floor into at least two compartments complying with Section ((407.4))  $\underline{407.5}$ .
- 420.7 Adult family homes. This section shall apply to all newly constructed adult family homes and all existing single-family homes being converted to adult family homes. This section shall not apply to those adult family homes licensed by the state of Washington department of social and health services prior to July 1, 2001.
- 420.7.1 Submittal standards. In addition to the requirements of Section 107, the submittal shall identify the project as a Group R-3 adult family home occupancy. A floor plan shall be submitted identifying the means of egress and the components in the means of egress such as stairs, ramps, platform lifts and elevators. The plans shall indicate the rooms used for clients and the sleeping room classification of each room.
- 420.7.2 Sleeping room classification. Each sleeping room in an adult family home shall be classified as one of the following:
- <u>1. Type S Where the means of egress contains stairs, elevators or platform lifts.</u>
- 2. Type NS1 Where one means of egress is at grade level or a ramp constructed in accordance with Section 420.7.8 is provided.
- 3. Type NS2 Where two means of egress are at grade level or ramps constructed in accordance with Section 420.7.8 are provided.
- 420.7.3 Types of locking devices and door activation. All bedrooms and bathroom doors shall be openable from the outside when locked.

Every closet door shall be readily openable from the inside.

Operable parts of door handles, pulls, latches, locks and other devices installed in adult family homes shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. Pocket doors shall have graspable hardware available when in the closed or open position.

The force required to activate operable parts shall be 5.0 pounds (22.2 N) maximum. Required exit door(s) shall have no additional locking devices. Required exit door hardware shall unlock inside and outside mechanisms when exiting the building allowing reentry into the adult family home without the use of a key, tool or special knowledge.

- 420.7.4 Smoke and carbon monoxide alarm requirements. All adult family homes shall be equipped with smoke and carbon monoxide alarms installed as required in Section 908.7. Alarms shall be installed in such a manner so that the detection device warning is audible from all areas of the dwelling upon activation of a single alarm.
- 420.7.5 Escape windows and doors. Every sleeping room shall be provided with emergency escape and rescue windows as required by Section 1029. No alternatives to the sill height such as steps, raised platforms or other devices placed by the openings will be approved as meeting this requirement.
- 420.7.6 Fire apparatus access roads and water supply for fire protection. Adult family homes shall be served by fire apparatus access roads and water supplies meeting the requirements of the local jurisdiction.
- 420.7.7 Grab bar general requirements. Where facilities are designated for use by adult family home clients, grab bars for water closets, bathtubs and shower stalls shall be installed according to this section.
- 420.7.7.1 Grab bar cross section. Grab bars with a circular cross section shall have an outside diameter of 1 1/4 inches minimum and 2 inches maximum. Grab bars with noncircular cross section shall have a cross section dimension of 2 inches maximum and a perimeter dimension of 4 inches minimum and 4 5/8 inches maximum.
- 420.7.7.2 Grab Bar Installation. Grab bars shall have a spacing of 1 1/2 inches between the wall and the bar. Projecting objects, control valves and bathtub or shower stall enclosure features above, below and at the ends of the grab bar shall have a clear space of 1 1/2 inches to the grab bar.

## EXCEPTION: Swing-up grab bars shall not be required to meet the 1 1/2 inch spacing requirement.

Grab bars shall have a structural strength of 250 pounds applied at any point on the grab bar, fastener, mounting device or supporting structural member. Grab bars shall not be supported directly by any residential grade fiberglass bathing or showering unit. Acrylic bars found in bathing units shall be removed.

Fixed position grab bars, when mounted, shall not rotate, spin

or move and have a graspable surface finish.

- 420.7.7.3 Grab Bars at Water Closets. Water closets shall have grab bars mounted on both sides. Grab bars can be a combination of fixed position and swing-up bars. Grab bars shall meet the requirements of Section 420.7.7. Grab bars shall mount between 33 inches and 36 inches above floor grade. Centerline distance between grab bars, regardless of type used, shall be between 25 inches minimum and 30 inches maximum.
- 420.7.7.3.1 Fixed position grab bars. Fixed position grab bars shall be a minimum of 36 inches in length and start 12 inches from the rear wall.
- 420.7.7.3.2 Swing-up grab bars. Swing-up grab bars shall be a minimum of 28 inches in length from the rear wall.
- 420.7.7.4 Grab bars at bathtubs. Horizontal and vertical grab bars shall meet the requirements of Section 420.7.7.
- 420.7.7.4.1 Vertical grab bars. Vertical grab bars shall be a minimum of 18 inches long and installed at the control end wall and head end wall. Grab bars shall mount within 4 inches of the exterior of the bath tub edge or within 4 inches within the bath tub. The bottom end of the bar shall start between 36 inches and 42 inches above floor grade.

EXCEPTION: The required vertical grab bar can be substituted with a floor to ceiling grab bar meeting the requirements of Section 420.7.7 at the control end and head end entry points.

- 420.7.7.4.2 Horizontal grab bars. Horizontal grab bars shall be provided at the control end, head end, and the back wall within the bathtub area. Grab bars shall be mounted between 33 inches and 36 inches above floor grade. Control end and head end grab bars shall be 24 inches minimum in length. Back wall grab bars shall be 36 inches minimum in length.
- <u>420.7.7.5 Grab bars at shower stalls.</u> Where shower stalls are provided to meet the requirements for bathing facilities, grab bars shall meet the requirements of Section 420.7.7.

EXCEPTION:

Shower stalls with permanent built-in seats are not required to have vertical or horizontal grab bars at the seat end wall. A vertical floor to ceiling grab bar shall be installed within 4 inches of the exterior of the shower aligned with the nose of the built-in seat.

- 420.7.7.5.1 Vertical grab bars. Vertical grab bars shall be 18 inches minimum in length and installed at the control end wall and head end wall. Vertical bars shall be mounted within 4 inches of the exterior of the shower stall or within 4 inches of the inside of the shower stall. The bottom end of vertical bars mount between 36 inches and 42 inches above floor grade.
- 420.7.7.5.2 Horizontal grab bars. Horizontal grab bars shall be installed on all sides of the shower stall mounted between 33 inches and 36 inches above the floor grade. Horizontal grab bars shall be a maximum of 6 inches from adjacent walls. Horizontal grab bars shall not interfere with shower control valves.
- 420.7.8 Ramps. All interior and exterior ramps, when provided,

shall be constructed in accordance with Section 1010 with a maximum slope of 1 vertical to 12 horizontal.

#### EXCEPTION:

Where it is technically infeasible to comply with Section 1010, ramps in existing buildings being converted to use as adult family homes shall be permitted to comply with the following:

1. They shall have a maximum slope of 1 unit vertical in 12 units horizontal (8 percent slope).

2. Landings of at least 3 feet by 3 feet (914 mm by 914 mm) shall be provided at the top and bottom of the ramp, where doors open onto the ramp, and where the ramp changes direction.

# 420.7.8.1 Handrails for ramps. Handrails shall be provided for ramps in accordance with Section 1010.9.

#### EXCEPTION:

Where it is technically infeasible to comply with Section 1010.9, ramps in existing buildings being converted to use as adult family homes shall be permitted to comply with the following:

- 1. Handrails shall be installed on both sides of ramps with a rise of more than 6 inches and a slope between 1 vertical to 12 horizontal and 1 vertical and 20 horizontal.
- 2. Handrail height, measured above the finished surface of the ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).
- 3. Handrails shall comply with Section 1012.3.
- 4. Handrails where required on ramps shall be continuous for the full length of the ramp. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inches (38 mm) between the wall and the handrails.

## 420.7.9 Stair treads and risers. Stair treads and risers shall be constructed in accordance with Section 1009.

#### **EXCEPTION:**

Where it is technically infeasible to comply with Section 1009, stair treads and risers in existing buildings being converted to use as adult family homes shall be permitted to comply with the following:

- 1. The maximum riser height shall be 7 3/4 inches (196 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.
- 2. The minimum tread depth shall be 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).
- 3. Winder treads shall have a minimum tread depth of 10 inches (254 mm) measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch (9.5 mm). Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch (9.5 mm) of the rectangular tread depth.
- 4. The radius of curvature at the nosing shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosings shall not exceed 1/2 inch (12.7 mm). A nosing is not required where the tread depth is a minimum of 11 inches (279 mm).
- 420.7.9.1 Handrails for treads and risers. Handrails shall be installed on both sides of treads and risers numbering from one riser to multiple risers. Handrails shall comply with Section 1009.15.
- 420.7.10 Shower stalls. Where provided to meet the requirements for bathing facilities, the minimum size of shower stalls for an adult family home shall be 30 inches deep by 48 inches long.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-0422 Section 422--((Ambulatory health care.)) Reserved.

- ((422.1 General. Occupancies classified as ambulatory health care facilities shall comply with the provisions of Sections 422.1 through 422.7 and other applicable provisions of this code by the services provided.
- **422.2 Separation.** Ambulatory health care facilities where four or more care recipients are rendered incapable of self-preservation at any given time shall be separated from adjacent spaces, corridors or tenants with a fire partition installed in accordance with Section 709.
- **422.3 Smoke compartments**. Where the aggregate area of one or more ambulatory health care facility exceeds 10,000 square feet on one story, the story shall be provided with a smoke barrier to subdivide the story into not less than two smoke compartments. Smoke barriers shall be installed in accordance with Section 710. The area of any one such smoke compartment shall not exceed 22,500 square feet  $(2092 \text{ m}^7)$ . The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60,960 mm).

EXCEPTION:

Where the ambulatory health care facility is completely surrounded by the required smoke barrier, such smoke barriers shall not be required to be continuous from an outside wall to outside wall.

- 422.4 Refuge area. At least 15 net square feet (2.8 m²) per occupant shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounge or dining areas and other low-hazard areas on each side of each smoke barrier. Each ambulatory health care facility shall be provided with access to the required refuge areas without passing through or utilizing adjacent tenant spaces.
- **422.5 Independent egress.** A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.
- 422.6 Automatic sprinkler systems. Automatic sprinkler systems shall be provided for ambulatory care facilities in accordance with Section 903.2.2.
- **422.7 Fire alarm systems.** A fire alarm system shall be provided for ambulatory health care facilities in accordance with Section 907.2.2.1.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-24-059, filed 11/29/10, effective 7/1/11)

WAC 51-50-0504 Section 504--Height.

**504.3 Stair enclosure pressurization increase.** For Group R1 and R2 occupancies in buildings of Type VA construction equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the maximum number of stories permitted in Section 504.2 may be increased by one provided the interior exit stairways and ramps are pressurized in accordance with Section 909.20 and Section 909.11.

**504.4 Roof structures.** (Same as  $((\frac{2009}{2009}))$  <u>2012</u> IBC except Section number revised)

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0506 Building area modifications.

**506.4** Single occupancy buildings with more than one story. The total allowable building area of a single occupancy building with more than one story above grade plane shall be determined in accordance with this section. The actual aggregate building area at all stories in the building shall not exceed the total allowable building area.

EXCEPTION:

Basements ((below the first story above grade plane)) need not be included in the total allowable building area, provided each basement does not exceed the area permitted for a building with no more than one story above grade plane.

506.5 Mixed occupancy area determination. The total allowable building area for buildings containing mixed occupancies shall be determined in accordance with the applicable provisions of this section. Basements ((below the first story above grade plane)) need not be included in the total allowable building area, provided each such basement does not exceed the area permitted for a building with no more than one story above grade plane.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0509 ((Reserved.)) Incidental uses.

Table 509
Incidental Uses

Room or Area	Separation and/or Protection
Dry type transformers over 112.5 kVA and required to be in a fire resistant room per NEC (NFPA 70) Section 450.21 (B) <sup>1</sup>	1 hour or provide automatic sprinkler system

<sup>&</sup>lt;sup>1</sup> Dry type transformers rated over 35,000 volts and oil-insulated transformers shall be installed in a transformer vault complying with NFPA 70.

(Remainder of table unchanged)

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0708 Section 708--((Shaft enclosures.)) Reserved.

((708.14.2.12 Hoistway venting. Hoistway venting required by Section 3004 need not be provided for pressurized elevator shafts.

708.14.2.13 Machine rooms. Elevator machine rooms shall be pressurized in accordance with this section unless separated from the hoistway shaft by construction in accordance with Section 707.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0710 Section 710--((Smoke barriers.)) Reserved.

((710.4 Continuity. Smoke barriers shall form an effective membrane continuous from outside wall to outside wall and from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above, including continuity through concealed spaces, such as those found above suspended ceiling, and interstitial structural and mechanical spaces. The supporting construction shall be protected to afford the required fire-resistance rating of the wall or floor supported in buildings of other than Type IIB, IIIB, or VB construction.

EXCEPTIONS:

<sup>1.</sup> Smoke-barrier walls are not required in interstitial spaces where such spaces are designed and constructed with ecilings that provide resistance to the passage of fire and smoke equivalent to that provided by the smoke-barrier walls.

<sup>2.</sup> Smoke barriers provided to enclose areas of refuge as required by Section 1007.6 are not required to extend from outside wall to outside wall.))

<u>AMENDATORY SECTION</u> (Amending WSR 04-01-108, filed 12/17/03, effective 7/1/04)

WAC 51-50-0902 Section 902--((Definitions.)) Reserved.

portable school classroom. A structure, transportable in one or more sections, which requires a chassis to be transported, and is designed to be used as an educational space with or without a permanent foundation. The structure shall be trailerable and capable of being demounted and relocated to other locations as needs arise.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-24-059, filed 11/29/10, effective 7/1/11)

## WAC 51-50-0903 Section 903--Automatic sprinkler systems.

- 903.2.1.6 Nightclub. An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code.
- 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E Occupancies.

EXCEPTIONS:

- 1. Portable school classrooms with an occupant load of 50 or less calculated in accordance with Table 1004.1.2, provided aggregate area of any cluster or portion of a cluster of portable school classrooms does not exceed  $5{,}000$  square feet (1465 m²); and clusters of portable school classrooms shall be separated as required by the building code.
- 2. Group E occupancies with an occupant load of 50 or less, calculated in accordance with Table (( $\frac{1004.1.1}{1004.1.2}$ )) 1004.1.2.
- **903.2.7 Group M.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy, where one of the following conditions exists:
  - 1. A Group M fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
- 2. A Group M fire area is located more than three stories above grade plane.
- 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).
- 4. Where a Group M occupancy that is used for the display and sale of upholstered furniture or mattresses exceeds 5000 square feet  $(464 \ \text{m}^2)$ .
- **903.2.8 Group R.** An automatic fire sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

EXCEPTION: Group R-1 if all of the following conditions apply:

- 1. The Group R fire area is no more than 500 square feet and is used for recreational use only.
- 2. The Group R fire area is only one story.
- 3. The Group R fire area does not include a basement.
- 4. The Group R fire area is no closer than 30 feet from another structure.
- 5. Cooking is not allowed within the Group R fire area.
- 6. The Group R fire area has an occupant load of no more than 8.
- 7. A hand held (portable) fire extinguisher is in every Group R fire area.

<u>AMENDATORY SECTION</u> (Amending WSR 12-01-099, filed 12/20/11, effective 4/1/12)

## WAC 51-50-0908 Section 908--Emergency alarm systems.

[F] 908.7 Carbon monoxide alarms. Group I or Group R occupancies shall be provided with single station carbon monoxide alarms installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units or sleeping units and on each level of the dwelling. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720-2012 and the manufacturer's instructions.

#### EXCEPTIONS:

- 1. For other than R-3 occupancies, the building does not contain a fuel-burning appliance, a fuel-burning fireplace, or an attached garage; or
- 2. Sleeping units or dwelling units in <u>I and</u> R-1 occupancies and R-2 college dormitories, hotel, and DSHS licensed boarding home and residential treatment facility occupancies which do not themselves contain a fuel-burning appliance, or a fuel-burning fireplace, or have an attached garage, ((but which are located in a building with a fuel-burning appliance, or a fuel-burning fireplace, or an attached garage,)) need not be provided with carbon monoxide alarms provided that:
- a. The sleeping unit or dwelling unit is not adjacent to any room which contains a fuel-burning appliance, a fuel-burning fireplace, or an attached garage; and
- $((\frac{2\pi}{2\pi}))$  b. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts with a supply or return register in the same room to any room containing a fuel-burning appliance, a fuel-burning fireplace, or to an attached garage; and
- ((3-)) <u>c.</u> The building is provided with a common area carbon monoxide ((alarm)) <u>detection</u> system.
- ((4-)) 3. An open parking garage, as defined in <u>Chapter 2 of</u> the <u>International Building Code</u>, or enclosed parking garage ventilated in accordance with Section 404 of the <u>International Mechanical Code</u> shall not be ((<del>deemed to be</del>)) <u>considered</u> an attached garage.
- 908.7.1 Carbon monoxide detection systems. Carbon monoxide detection systems, that include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720-2012 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-0909 Section 909--Smoke control systems.

((909.6.3 Elevator shaft pressurization. Where elevator shaft

pressurization is required to comply with Exception 6 of Section 708.14.1, the pressurization system shall comply with and be maintained in accordance with 708.14.2.

- 909.6.3.1 Activation. The elevator shaft pressurization system shall be activated by a fire alarm system which shall include smoke detectors or other approved detectors located near the elevator shaft on each floor as approved by the building official and fire code official. If the building has a fire alarm panel, detectors shall be connected to, with power supplied by, the fire alarm panel.
- 909.6.3.2 Power system. The power source for the fire alarm system and the elevator shaft pressurization system shall be in accordance with Section 909.11.))
- 909.21.12 Hoistway venting. Hoistway venting required by Section 3004 need not be provided for pressurized elevator shafts.
- 909.21.13 Machine rooms. Elevator machine rooms shall be pressurized in accordance with this section unless separated from the hoistway shaft by construction in accordance with Section 707.

<u>AMENDATORY SECTION</u> (Amending WSR 10-24-059, filed 11/29/10, effective 7/1/11)

WAC 51-50-1005 Section 1005--((Egress width.)) Reserved.

((1005.1 Minimum required egress width. The means of egress width shall not be less than required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. The width shall not be less than specified elsewhere in this code. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress.

EXCEPTIONS:

1. Means of egress complying with Section 1028.

2. For other than H and 1-2 occupancies, the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.2 inches (5.1 mm) per occupant for stairways and by 0.15 inches (3.8 mm) per occupant for other egress components in buildings that are provided with sprinkler protection in accordance with 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with 907.5.2.2.))

## WAC 51-50-1008 Section 1008--Doors, gates and turnstiles.

- 1008.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:
  - 1. Places of detention or restraint.
- 2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
  - 2.1. The locking device is readily distinguishable as locked;
- 2.2. A readily visible <u>and durable</u> sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background; and
- 2.3. The use of the key-operated locking device is revocable by the building official for due cause.
- 3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.
- 4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or a tool.
- 5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
- 6. Approved, listed locks without delayed egress shall be permitted in Group R-2 boarding homes licensed by Washington state, provided that:
- 6.1. The clinical needs of one or more patients require specialized security measures for their safety.
- 6.2. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 6.3. The doors unlock upon loss of electrical power controlling the lock or lock mechanism.
- 6.4. The lock shall be capable of being deactivated by a signal from a switch located in an approved location.
- 6.5. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.
- 1008.1.9.6 Special locking arrangements in Group I-2. Approved special egress locks shall be permitted in a Group I-2 Occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an

automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors (( $\frac{\text{unlock}}{\text{below}}$ ))  $\frac{\text{are}}{\text{below}}$ )  $\frac{1}{2}$ .

- 1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The doors unlock upon loss of power controlling the lock or lock mechanism.
- 3. The door locks shall have the capability of being unlocked by a signal from the *fire command center*, a nursing station or other *approved* location.
- 4. A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
- $\underline{5}$ . The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the International Fire Code.
- ((5.)) <u>6.</u> There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.
  - ((6.)) 2. Emergency lighting shall be provided at the door.

EXCEPTION:

Items  $1((\frac{2}{2}, \frac{3}{3}))$  through 4 and  $((\frac{5}{2}))$  6 shall not apply to doors to areas where persons, which because of clinical needs, require restraint or containment as part of the function of a  $((\frac{3}{2}))$  1 mental hospital) psychiatric treatment area provided that all clinical staff shall have the keys, codes or other means necessary to operate the locking devices.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-1009 Section 1009--Stairways and handrails.

1009.3 Exit access stairways. Floor openings between stories created by exit access stairways shall be enclosed.

EXCEPTIONS:

1. In other than Group I-2 and I-3 occupancies, *exit access stairways* that serve, or atmospherically communicate between, only two stories are not required to be enclosed. Such interconnected stories shall not be open to other stories.

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<sup>2.</sup> Exit access stairways serving and contained within a single residential dwelling unit or sleeping unit in Group R-1, R-2 or R-3 occupancies are not required to be enclosed.

<sup>3.</sup> In Group B or M occupancies, exit access stairways that are designed exclusively for circulation are not required to be enclosed provided that the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the area of the floor opening between stories does not exceed twice the horizontal projected area of the exit access stairway, and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.

<sup>4.</sup> In other than Group B and M occupancies, *exit access stairways* that are designed exclusively for circulation are not required to be enclosed provided that the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the floor opening does not connect more than four stories, the area of the floor opening between stories does not exceed twice the horizontal projected area of the *exit access stairway*, and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.

<sup>5.</sup> Exit access stairways within an atrium complying with the provisions of Section 404 are not required to be

enclosed.

- 6. Exit access stairways and ramps in open parking garages that serve only the parking garage are not required to be enclosed.
- 7. Stairways serving outdoor facilities where all portions of the means of egress are essentially open to the outside are not required to be enclosed.
- 8. Exit access stairways serving stages, platforms and technical production areas in accordance with Sections 410.6.2 and 410.6.3 are not required to be enclosed.
- 9. Stairways are permitted to be open between the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.
- 10. In group I-3 occupancies, exit access stairways constructed in accordance with Section 408.5 are not required to be enclosed.

((1009.15)) 1009.18 Stairways in individual dwelling units. Stairs or ladders within an individual dwelling unit used for access to areas of 200 square feet (18.6 m²) or less, and not containing the primary bathroom or kitchen, are exempt from the requirements of Section 1009.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-10100 Section 1010--Ramps.

1010.1 Scope. The provisions of this section shall apply to ramps used as a component of a means of egress.

EXCEPTIONS:

- 1. Other than ramps that are part of the accessible routes providing access in accordance with Sections 1108.2 through 1108.2.4 and 1108.2.6, ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1028.11
- 2. Curb ramps shall comply with ICC A117.1.
- 4. In a parking garage where one accessible means of egress serving accessible parking spaces or other accessible elements is provided, a second accessible means of egress serving that area may include a vehicle ramp that does not comply with Sections (( $\frac{1010.4}{1010.6.4}$ ))  $\frac{1010.5}{1010.7.4}$  shall be provided at any change of direction in the accessible means of egress.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-1014 ((Exit access.)) Reserved.

((<del>1014.2.2 Group I-2.</del>

General. Habitable spaces and suites in Group I-2 occupancies are permitted to comply with this Section 1014.2.2.

1014.2.2.1 Exit access doors. Habitable spaces and suites in Group I-2 occupancies shall have an exit access door leading directly to a corridor.

- EXCEPTION: Rooms with exit doors opening directly to the outside at ground level.
- 1014.2.2.2 Exit access through suites. Exit access from areas not classified as a Group I-2 Occupancy suite shall not pass through a suite. In a suite required to have more than one exit, one exit access may pass through an adjacent suite if all other requirements of Section 1014.2 are satisfied.
- 1014.2.2.3 Separation. Suites in Group I-2 Occupancies shall be separated from other portions of the building by a smoke partition complying with Section 711. Partitions within suites are not required to be smoke-resistant or fire-resistance-rated unless required by another section of this Code.
- 1014.2.2.4 Suites containing patient sleeping areas. Patient sleeping areas in Group I-2 Occupancies shall be permitted to be divided into suites with one intervening room if one of the following conditions is met:
- 1. The intervening room within the suite is not used as an exit access for more than eight patient beds.
- 2. The arrangement of the suite allows for direct and constant visual supervision by nursing personnel.
- 1014.2.2.4.1 Area. Suites of sleeping rooms shall not exceed 5,000 square feet  $(465 \text{ m}^2)$ .
- 1014.2.2.4.2 Exit access. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet (93 m²) shall have at least two exit access doors located in accordance with Section 1015.2.
- 1014.2.2.4.3 Travel distance. The travel distance between any point in a suite of sleeping rooms and an exit access door of that suite shall not exceed 100 feet (30,480 mm). The travel distance between any point in a Group I-2 Occupancy patient sleeping room and an exit access door in that room shall not exceed 50 feet (15,240 mm).
- 1014.2.2.5 Suites not containing patient sleeping areas. Areas other than patient sleeping areas in Group I-2 Occupancies shall be permitted to be divided into suites that comply with Sections 1014.2.2.5.1 through 1014.2.2.5.4.
- 1014.2.2.5.1 Area. Suites of rooms, other than patient sleeping rooms, shall not exceed 10,000 square feet (929 m²).
- 1014.2.2.5.2 Exit access. Any rooms or suite of rooms, other than patient sleeping rooms, of more than 2,500 square feet (232 m<sup>2</sup>) shall have at least two exit access doors located in accordance with Section 1015.2.
- 1014.2.2.5.3 One intervening room. For rooms other than patient sleeping rooms, suites of rooms are permitted to have one intervening room if the travel distance within the suite to the exit access door is not greater than 100 feet (30,480 mm).

1014.2.2.5.4 Two intervening rooms. For rooms other than patient sleeping rooms located within a suite, exit access travel from within the suite shall be permitted through two intervening rooms where the travel distance to the exit access door is not greater than 50 feet (15,240 mm).)

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

#### WAC 51-50-1018 Section 1018--Corridors.

1018.5 Air movement in corridors. Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.

#### EXCEPTIONS:

- 1. Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, smoking lounges and janitor closets, shall be permitted provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.
- 2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.
- 3. Where located within tenant spaces of one thousand square feet (93 m<sup>2</sup>) or less in area, utilization of corridors for conveying return air is permitted.
- 4. Incidental air movement from pressurized rooms within health care facilities, provided that a corridor is not the primary source of supply or return to the room.
- 5. Where such air is part of an engineered smoke control system.
- 6. Air supplied to corridors serving residential occupancies shall not be considered as providing ventilation air to the dwelling units subject to the following:
- 6.1 The air supplied to the corridor is one hundred percent outside air; and
- 6.2 The units served by the corridor have conforming ventilation air independent of the air supplied to the corridor; and
- 6.3 For other than high-rise buildings, the supply fan will automatically shut off upon activation of corridor smoke detectors which shall be spaced at no more than thirty feet (9,144 mm) on center along the corridor; or
- 6.4 For high-rise buildings, corridor smoke detector activation will close required smoke/fire dampers at the supply inlet to the corridor at the floor receiving the alarm.

1018.6 Corridor continuity. Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. Where the path of egress travel within a fire-resistance-rated corridor to the exit includes travel along unenclosed exit access stairways or ramps, the fire resistance-rating shall be continuous for the length of the stairway or ramp and for the length of the connecting corridor on the adjacent floor leading to the exit.

#### EXCEPTIONS:

- 1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.
- 2. In Group R-2 boarding homes and residential treatment facilities licensed by Washington state, seating areas shall be allowed to be open to the corridor provided:
- 2.1 The seating area is constructed as required for the corridor;
- 2.2 The floor is separated into at least two compartments complying with Section ((407.4)) 407.5;
- 2.3 Each individual seating area does not exceed 150 square feet, excluding the corridor width;
- 2.4 The combined total space of seating areas per compartment does not exceed 300 square feet, excluding the corridor width;
- 2.5 Combustible furnishings located within the seating area shall be in accordance with the International Fire Code Section 805; and
- 2.6 Emergency means of egress lighting is provided as required by Section 1006 to illuminate the area.

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

#### WAC 51-50-1101 Section 1101--General.

- 1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC Al17.1, except those portions of ICC Al17.1 amended by this section.
- ((1101.2.1 (ICC A117.1 Section 403) Landings for walking surfaces. The maximum rise for any run is 30 inches (762 mm). Landings shall be provided at the top and bottom of any run. Landings shall be level and have a minimum dimension measured in the direction of travel of not less than 60 inches (1525 mm).)
- 1101.2.2 (ICC A117.1 Section 403.5) Clear width of accessible route. Clear width of an accessible route shall comply with ICC A117.1 (( $\frac{\text{Table}}{\text{Table}}$ )) Section 403.5. For exterior routes of travel, the minimum clear width shall be 44 inches (1118 mm).
- 1101.2.3 (ICC A117.1 Section 404.2.8) Door-opening force. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open doors other than fire doors shall be as follows:
  - 1. Interior hinged door: 5.0 pounds (22.2 N) maximum
- 2. Interior sliding or folding doors: 5.0 pounds (22.2 N) maximum
- 3. Exterior hinged, sliding or folding door: 10 pounds (44.4 N) maximum.

EXCEPTION: Interior or exterior automatic doors complying with Section 404.3 of ICC ANSI A117.1.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

- 1101.2.4 (ICC A117.1 Section 407.4.6.2.2) Arrangement of elevator car buttons. This section is not adopted.
- ((1101.2.5 (ICC A117.1 603.4) Coat hooks and shelves. Coat hooks shall be located within one of the reach ranges specified in Section 308. Shelves shall be installed so the top of the shelf is 40 inches (1015 mm) minimum and 42 inches maximum above the floor.
- 1101.2.6 (ICC A117.1 604.11) Coat hooks and shelves. Coat hooks provided within toilet compartments shall be located within one of the reach ranges specified in Section 308. Shelves shall be installed so the top of the shelf is 40 inches (1015 mm) minimum and 42 inches maximum above the floor.)
- 1101.2.7 (ICC ANSI A117.1 606.7) Operable parts. Operable parts on drying equipment, towel or cleansing product dispensers, and disposal fixtures shall comply with Table ((606.7, except the maximum reach height shall be 40 inches (1015 mm) for reach depths less than 6 inches)) 603.6.
- 1101.2.8 (ICC A117.1 Section 604.6) Flush controls. Flush controls

shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309, except the maximum height above the floor shall be 44 inches. Flush controls shall be located on the open side of the water closet.

EXCEPTION:

In ambulatory accessible compartments complying with Section ((604.9))  $\underline{604.10}$ , flush controls shall be permitted to be located on either side of the water closet.

- 1101.2.9 (ICC A117.1 Section 703.6.3.1) International Symbol of Accessibility. Where the International Symbol of Accessibility is required, it shall be proportioned complying with ICC A117.1 Figure 703.6.3.1. All interior and exterior signs depicting the International Symbol of Accessibility shall be white on a blue background.
- ((1101.2.10 (ICC A117.1 Section 404.3.5) Control switches. Manually operated control switches shall comply with Section 309, except they shall be placed 32 inches minimum (815 mm) and 40 inches maximum (1015 mm) above the floor. The clear floor space adjacent to the control switch shall be located beyond the arc of the door swing and centered on the control switch.))

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-1106 Section 1106--Parking and passenger loading facilities.

((1106.3 Group I-2 outpatient facilities. Ten percent, but not less than one, of patient and visitor parking spaces provided to serve Group I-2 outpatient facilities shall be accessible.))

1106.6 Location. Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance. In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility. Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. Wherever practical, the accessible route shall not cross lanes of vehicular traffic. Where crossing traffic lanes is necessary, the route shall be designated and marked as a crosswalk.

EXCEPTION:

- 1. In multilevel parking structures, van accessible parking spaces are permitted on one level.
- 2. Accessible parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee and user convenience.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

## WAC 51-50-1107 Section 1107--Dwelling units and sleeping units.

- 1107.6 Group R. Accessible units, Type A units and Type B units shall be provided in Group R Occupancies in accordance with Sections 1107.6.1 through 1107.6.4. Accessible and Type A units shall be apportioned among efficiency dwelling units, single bedroom units and multiple bedroom units, in proportion to the numbers of such units in the building.
- 1107.6.2.1.1 Type A units. In Group R-2 Occupancies containing more than 10 dwelling units or sleeping units, at least 5 percent, but not less than one, of the units shall be a Type A unit. All units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units, as described in Section 1107.6.

EXCEPTIONS:

- 1. The number of Type A units is permitted to be reduced in accordance with Section 1107.7.
- 2. Existing structures on a site shall not contribute to the total number of units on a site.

1107.6.2.2 Group R-2 other than apartment houses, monasteries and convents. In Group R-2 Occupancies, other than apartment houses, monasteries and convents, Accessible units and Type B units shall be provided in accordance with Sections 1107.6.2.2.1 and 1107.6.2.2.2. Accessible units shall be dispersed among the various classes of units, as described in Section 1107.6.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

### WAC 51-50-1203 Section 1203--Ventilation.

- **1203.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *International Mechanical Code*.
- 1203.2 Attic spaces. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof framing members shall have cross ventilation for each separate space by ((ventilating)) ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. ((A minimum of)) An airspace of not less than 1 inch (25 mm) ((of airspace)) shall be provided between the insulation and the roof sheathing. The net free ventilating area shall not be less than 1/150th of the area of the space ventilated((, with 50 percent of the required ventilating area provided by ventilators located in the upper portion of the

space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents)).

**EXCEPTIONS:** 

- 1. The ((minimum required net free ventilating)) net free cross-ventilation area shall be permitted to be reduced to 1/300 ((of the area of the space ventilated;)) provided ((a vapor retarder having a transmission rate not exceeding one perm in accordance with ASTM E 96 is installed on the warm side of the attic insulation and provided 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated is at least 3 feet (914 mm) above cave or cornice vents, with the balance of the required ventilation provided by eave or cornice vents)) not less than 50 percent and not more than 80 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

  2. The net free cross-ventilation area shall be permitted to be reduced to 1/300 where a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
- 3. Attic ventilation shall not be required when determined not necessary by the building official due to atmospheric or climatic conditions.
- <u>4.</u> Unvented attic assemblies (spaces between the ceiling joists of the top story and the roof rafters) shall be permitted if all the following conditions are met:
- ((2.1)) 4.1 The unvented attic space is completely contained within the building thermal envelope.
- $((\frac{2.2}{0.2}))$  4.2 No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.  $((\frac{2.3}{0.2}))$  4.3 Where wood shingles or shakes are used, a minimum 1/4 inch (6 mm) vented air space separates the shingles or shakes and the roofing underlayment above the structural sheathing.
- ((2.4)) 4.4 In Climate Zones 5B and 6B, any air-impermeable insulation shall be a Class II vapor retarder, or shall have a Class II vapor retarder coating or covering in direct contact with the underside of the insulation.
- $((\frac{2.5}{2.5}))$  <u>4.5</u> Either items a, b, or c below shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing.
- a. Air-impermeable insulation only. Insulation shall be applied in direct contact to the underside of the structural roof sheathing.
- b. Air-permeable insulation only. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing as specified ((per WA Climate Zone)) in Table 1203.2.1 for condensation control.
- ((i. Climate Zone #1 R-10 minimum rigid board or air-impermeable insulation R-value.
- ii. Climate Zone #2 R-25 minimum rigid board or air-impermeable insulation R-value.))
- c. Air-impermeable and air-permeable insulation. The air-impermeable insulation shall be applied in direct contact to the underside of the structural roof sheathing as specified ((per WA Climate Zone)) in Table 1203.2.1 for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation. i. Climate Zone #1 R-10 minimum rigid board or air-impermeable insulation R-value.
- ii. Climate Zone #2 R-25 minimum rigid board or air-impermeable insulation R-value.
- d. Where preformed insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.

## <u>Table 1203.2.1</u> <u>Insulation for Condensation Control</u>

CLIMATE ZONE	MINIMUM RIGID BOARD ON <u>AIR-IMPERMEABLE</u> <u>INSULATION <i>R</i>-VALUE<sup>a</sup></u>
<u>4C</u>	<u>R-15</u>
<u>5B</u>	<u>R-20</u>
<u>6B</u>	<u>R-25</u>

<sup>a</sup> Contributes to but does not supercede the requirements for insulation in the Washington State Energy Code (WAC 51-11).

- 1203.4 Natural ventilation. For other than Group R Occupancies, natural ventilation of an occupied space shall be through windows, doors, louvers or other openings to the outdoors. The operating mechanism for such openings shall be provided with ready access so that the openings are readily controllable by the building occupants. Group R Occupancies shall comply with the *International Mechanical Code*.
- 1203.6 Radon resistive construction standards. The criteria of this section establishes minimum radon resistive construction requirements for Group R Occupancies.
- 1203.6.1 Application. The requirements of Section 1203.6 shall be

adopted and enforced by all jurisdictions of the state according to the following subsections.

- **1203.6.1.1** All jurisdictions of the state shall comply with Section 1203.6.2.
- 1203.6.1.2 Clark, Ferry, Okanogan, Pend Oreille, Skamania, Spokane, and Stevens counties shall also comply with Section 1203.6.3.
- 1203.6.2 State wide radon requirements.
- 1203.6.2.1 Crawlspaces. All crawlspaces shall comply with the requirements of this section.
- **1203.6.2.2 Ventilation.** All crawlspaces shall be ventilated as specified in Section 1203.3.

If the installed ventilation in a crawlspace is less than one square foot for each 300 square feet of crawlspace area, or if the crawlspace vents are equipped with operable louvers, a radon vent shall be installed to originate from a point between the ground cover and soil. The radon vent shall be installed in accordance with Sections 1203.6.3.2.6 and 1203.6.3.2.7.

1203.6.2.3 Crawlspace plenum systems. In crawlspace plenum systems used for providing supply air for an HVAC system, aggregate, a permanently sealed soil gas retarder membrane and a radon vent pipe shall be installed in accordance with Section 1203.6.3.2. Crawlspaces shall not be used for return air plenums.

In addition, an operable radon vent fan shall be installed and activated. The fan shall be located as specified in Section 1203.6.3.2.7. The fan shall be capable of providing at least 100 cfm at 1-inch water column static pressure. The fan shall be controlled by a readily accessible manual switch. The switch shall be labeled "RADON VENT FAN."

## 1203.6.3 Radon prescriptive requirements.

1203.6.3.1 Scope. This section applies to those counties specified in Section 1203.6.1.2. This section establishes prescriptive construction requirements for reducing the potential for radon entry into all Group R Occupancies, and for preparing the building for future mitigation if desired.

In all crawlspaces, except crawlspace plenums used for providing supply air for an HVAC system, a continuous air barrier shall be installed between the crawlspace area and the occupied area to limit air transport between the areas. If a wood sheet subfloor or other material is utilized as an air barrier, in addition to the requirements of Section 502.1.6.2 of the Washington State Energy Code, all joints between sheets shall be sealed.

## 1203.6.3.2 Floors in contact with the earth.

1203.6.3.2.1 General. Concrete slabs that are in direct contact with the building envelope shall comply with the requirements of this section.

EXCEPTION: Concrete slabs located under garages or other than Group R Occupancies need not comply with this chapter.

1203.6.3.2.2 Aggregate. A layer of aggregate of 4-inch minimum thickness shall be placed beneath concrete slabs. The aggregate shall be continuous to the extent practical.

### 1203.6.3.2.3 Gradation. Aggregate shall:

- 1. Comply with ASTM Standard C-33 Standard Specification for Concrete Aggregate and shall be size No. 8 or larger size aggregate as listed in Table 2, Grading Requirements for Course Aggregate; or
- 2. Meet the 1988 Washington State Department of Transportation Specification 9-03.1 (3) "Coarse Aggregate for Portland Cement Concrete," or any equivalent successor standards. Aggregate size shall be of Grade 8 or larger as listed in Section 9-03.1 (3) C, "Grading"; or
- 3. Be screened, washed pea gravel free of deleterious substances in a manner consistent with ASTM Standard C-33 with 100 percent passing a 1/2-inch sieve and less than 5 percent passing a No. 16 sieve. Sieve characteristics shall conform to those acceptable under ASTM Standard C-33.

EXCEPTION: Aggregate shall not be required if a substitute material or system, with sufficient load bearing characteristics, and having approved capability to provide equal or superior air flow, is installed.

- 1203.6.3.2.4 Soil-gas retarder membrane. A soil-gas retarder membrane, consisting of at least one layer of virgin polyethylene with a thickness of at least 6 mil, or equivalent flexible sheet material, shall be either placed directly under all concrete slabs so that the slab is in direct contact with the membrane, or on top of the aggregate with 2 inches minimum of fine sand or pea gravel installed between the concrete slab and membrane. The flexible sheet shall extend to the foundation wall or to the outside edge of the monolithic slab. Seams shall overlap at least 12 inches. The membrane shall also be fitted tightly to all pipes, wires, and other penetrations of the membrane and sealed with an approved sealant or tape. All punctures or tears shall be repaired with the same or approved material and similarly lapped and sealed.
- 1203.6.3.2.5 Sealing of penetrations and joints. All penetrations and joints in concrete slabs or other floor systems and walls below grade shall be sealed by an approved sealant to create an air barrier to limit the movement of soil-gas into the indoor air.

Sealants shall be approved by the manufacturer for the intended purpose. Sealant joints shall conform to manufacturer's specifications. The sealant shall be placed and tooled in accordance with manufacturer's specifications. There shall be no gaps or voids after the sealant has cured.

1203.6.3.2.6 Radon vent. One continuous sealed pipe shall run from a point within the aggregate under each concrete slab to a point outside the building. Joints and connections shall be permanently gas tight. The continuous sealed pipe shall interface with the aggregate in the following manner, or by other approved equal method. The pipe shall be permanently connected to a "T" within the aggregate area so that the two end openings of the "T" lie within the aggregate area. A minimum of 5 feet of perforated drain pipe of 3 inches minimum diameter shall join to and extend from the

"T." The perforated pipe shall remain in the aggregate area and shall not be capped at the ends. The "T" and its perforated pipe extensions shall be located at least 5 feet horizontally from the exterior perimeter of the aggregate area.

The continuous sealed pipe shall terminate no less than 12 inches above the eave, and more than 10 horizontal feet from a woodstove or fireplace chimney, or operable window. The continuous sealed pipe shall be labeled "radon vent." The label shall be placed so as to remain visible to an occupant.

The minimum pipe diameter shall be 3 inches unless otherwise approved. Acceptable sealed plastic pipe shall be smooth walled, and may include either PVC schedule 40 or ABS schedule of equivalent wall thickness.

The entire sealed pipe system shall be sloped to drain to the subslab aggregate.

The sealed pipe system may pass through an unconditioned attic before exiting the building; but to the extent practicable, the sealed pipe shall be located inside the thermal envelope of the building in order to enhance passive stack venting.

EXCEPTION:

- A fan for subslab depressurization system includes the following:
- 1. Soil-gas retarder membrane as specified in Section 1203.6.3.2.4;
- 2. Sealing of penetrations and joints as specified in Section 1203.6.3.2.5;
- 3. A 3-inch continuous sealed radon pipe shall run from a point within the aggregate under each concrete slab to a point outside the building;
- 4. Joints and connections shall be gas tight, and may be of either PVC schedule 40 or ABS schedule of equivalent in wall thickness;
- 5. A label of "radon vent" shall be placed on the pipe so as to remain visible to an occupant;
- 6. Fan circuit and wiring as specified in Section 1203.6.3.2.7 and a fan.

If the subslab depressurization system is exhausted through the concrete foundation wall or rim joist, the exhaust terminus shall be a minimum of 6 feet from operable windows or outdoor air intake vents and shall be directed away from operable windows and outdoor air intake vents to prevent radon reentrainment.

1203.6.3.2.7 Fan circuit and wiring and location. An area for location of an in-line fan shall be provided. The location shall be as close as practicable to the radon vent pipe's point of exit from the building, or shall be outside the building shell; and shall be located so that the fan and all downstream piping is isolated from the indoor air.

Provisions shall be made to allow future activation of an inline fan on the radon vent pipe without the need to place new wiring. A 110 volt power supply shall be provided at a junction box near the fan location.

1203.6.3.2.8 Separate aggregate areas. If the 4-inch aggregate area underneath the concrete slab is not continuous, but is separated into distinct isolated aggregate areas by a footing or other barrier, a minimum of one radon vent pipe shall be installed into each separate aggregate area.

EXCEPTION:

Separate aggregate areas may be considered a single area if a minimum 3-inch diameter connection joining the separate areas is provided for every 30 feet of barrier separating those areas.

1203.6.3.2.9 Concrete block walls. Concrete block walls connected to below grade areas shall be considered unsealed surfaces. All

openings in concrete block walls that will not remain accessible upon completion of the building shall be sealed at both vertical and horizontal surfaces, in order to create a continuous air barrier to limit the transport of soil-gas into the indoor air.

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

## WAC 51-50-1204 Section 1204--Temperature control.

1204.1 Equipment and systems. Interior spaces intended for human occupancy shall be provided with active or passive space-heating systems capable of maintaining a minimum indoor temperature of  $68^{\circ}F$  (20°C) at a point 3 feet (914 mm) above the floor on the design heating day.

EXCEPTION:

- 1. Interior spaces where the primary purpose is not associated with human comfort.
- 2. Group R-1 Occupancies not more than 500 square feet.

**1204.2.1 Definitions.** For the purposes of this section only, the following definitions apply.

**DESIGNATED AREAS** are those areas designated by a county to be an urban growth area in chapter 36.70A RCW and those areas designated by the U.S. Environmental Protection Agency as being in nonattainment for particulate matter.

**SUBSTANTIALLY REMODELED** means any alteration or restoration of a building exceeding 60 percent of the appraised value of such building within a 12-month period. For the purpose of this section, the appraised value is the estimated cost to replace the building and structure in-kind, based on current replacement costs.

- 1204.2.2 Primary heating source. Primary heating sources in all new and substantially remodeled buildings in designated areas shall not be dependent upon wood stoves.
- 1204.2.3 Solid fuel burning devices. No <u>new or</u> used solid fuel burning device shall be installed in new or existing buildings unless such device is United States Environmental Protection Agency certified (( $\frac{1}{1}$ ) or exempt from certification by the United States Environmental Protection Agency and conforms with RCW 70.94.011, 70.94.450, 70.94.453 and 70.94.457.

EXCEPTION:

((Antique)) 1. Wood cook stoves ((and)).

2. Antique wood heaters manufactured prior to 1940.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-1208 Section 1208--Interior space dimensions.

1208.2 Minimum ceiling heights. Occupiable spaces and habitable spaces shall have a ceiling height of not less than 7 feet 6 inches (2286 mm). Bathrooms, toilet rooms, kitchen, storage rooms and laundry rooms shall be permitted to have a ceiling height of not less than 7 feet (2134 mm).

#### EXCEPTIONS:

1. In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center ((and projecting)) shall be permitted to project not more than 6 inches (152 mm) below the required ceiling height.

2. If any room in a building has a sloped ceiling, the prescribed ceiling height for the room is required in one-half the area thereof. Any portion of the room measuring less than 5 feet (1524 mm) from the finished floor to the ceiling shall not be included in any computation of the minimum area thereof.

3. The height of mezzanines ((constructed)) and spaces below mezzanines shall be in accordance with Section 505.1

**1208.3 Room area.** Every dwelling unit shall have ((at least)) no fewer than one room that shall have not less than 120 square feet (13.9  $m^2$ ) of net floor area. Other habitable rooms shall have a net floor area of not less than 70 square feet (6.5  $m^2$ ).

EXCEPTION: Kitchens ((in one- and two-family dwellings)) are not required to be of a minimum floor area.

Portions of a room with a sloped ceiling measuring less than 5 feet (1524 mm) or a flat ceiling measuring less than 7 feet (2134 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum habitable area for that room.

<u>AMENDATORY SECTION</u> (Amending WSR 05-01-014, filed 12/2/04, effective 7/1/05)

# WAC 51-50-1210 Section 1210--(( $\frac{\text{Surrounding materials}}{\text{and bathroom requirements}}$ )

 $((\frac{1210.5}{}))$  <u>1210.4</u> Toilet rooms. This section is not adopted. (The requirements of this section have been moved to Section  $((\frac{2902.2.1.1}{}))$  <u>2902.3.1.1</u>)

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-1403 Section 1403--Performance requirements.

1403.2 Weather protection. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in

Section 1405.4. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior veneer, as described in Section 1404.2, and a means  $((\frac{of}))$  for draining water that enters the assembly to the exterior. An air space cavity is not required under the exterior cladding for an exterior wall clad with lapped or panel siding made of plywood, engineered wood, hardboard, or fiber cement. Protection against condensation in the exterior wall assembly shall be provided in accordance with Section 1405.3.

#### EXCEPTIONS:

- 1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry walls designed in accordance with Chapters 19 and 21, respectively.
- 2. Compliance with the requirements for a means of drainage, and the requirements of Sections 1404.2 and ((1405.3)) 1405.4, shall not be required for an exterior wall envelope that has been demonstrated through testing to resist wind-driven rain, including joints, penetrations and intersections with dissimilar materials, in accordance with ASTM E 331 under the following conditions:
- 2.1 Exterior wall envelope test assemblies shall include at least one opening, one control joint, one wall/eave interface and one wall sill. All tested openings and penetrations shall be representative of the intended end-use configuration.
- 2.2 Exterior wall envelope test assemblies shall be at least 4 feet by 8 feet (1219 mm by 2438 mm) in size.
- 2.3 Exterior wall envelope assemblies shall be tested at a minimum differential pressure of 6.24 pounds per square foot (psf)  $(0.297 \text{ kN/m}^2)$ .
- 2.4 Exterior wall envelope assemblies shall be subjected to a minimum test exposure duration of 2 hours. The exterior wall envelope design shall be considered to resist wind-driven rain where the results of testing indicate that water did not penetrate control joints in the exterior wall envelope, joints at the perimeter of openings or intersections of terminations with dissimilar materials.
- 3. Exterior insulation and finish systems (EIFS) complying with Section 1408.4.1.

1403.5 Vertical and lateral flame propagation. Exterior walls on buildings of Type I, II, III, or IV construction that are greater than 40 feet (12,192 mm) in height above grade plane and contain a combustible water-resistive barrier shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

#### EXCEPTION:

Walls that contain less than 500 gm/m<sup>2</sup> combustible material and where the water-resistive barrier has a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E 84 or UL 723.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-1405 Section 1405--((Installation of wall coverings.)) Reserved.

((1405.6.2 Seismic requirements. Anchored masonry veneer located in Seismic Design Category C, D, E, or F shall conform to the requirements of Section 6.2.2.10, except Section 6.2.2.10.3.2, of TMS 402/ACI 530/ASCE 5.))

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-1609 Section 1609--((Wind loads.)) Reserved.

((1609.1.1 Determination of wind loads. Wind loads on every building or structure shall be determined in accordance with Chapter 6 of ASCE 7 or provisions of the alternate all-heights method in Section 1609.6. The type of opening protection required, the basic wind speed and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

#### **EXCEPTIONS:**

- 1. Subject to the limitations of Section 1609.1.1.1, the provisions of ICC 600 shall be permitted for applicable Group R-2 and R-3 buildings.
- 2. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of the AF&PA WFCM.
- 3. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of AISI S230.
- 4. Designs using NAAMM FP 1001.
- 5. Designs using TIA-222 for antenna-supporting structures and antennas. In section 2.6.6.2, the extent of Topographic Category 2, escarpments, shall extend 16 times the height of the escarpment.
- 6. Wind tunnel test in accordance with Section 6.6 of ASCE 7, subject to the limitations in Section 1609.1.1.2.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

#### WAC 51-50-1702 Section 1702--Definitions.

1702.1 ((General.)) Definitions. The following terms are defined in Chapter 2: (add terms from 2012 IBC pg 379)

small Business. ((Any business entity (including a sole proprietorship, corporation, partnership or other legal entity) which is owned and operated independently from all other businesses, which has the purpose of making a profit, and which has fifty or fewer employees, or which has a million dollars or less per year in gross sales, of window and door products.))

### NEW SECTION

## WAC 51-50-1705 Required verification and inspection.

**Modify Table 1705.3.** Remainder of Table 1705.3 remains as published in the 2012 IBC.

#### Table 1705.3

### Required Verification and Inspection of Concrete Construction

Verification and Inspection	Continuous	Periodic	Referenced Standard <sup>a</sup>	IBC Reference
3. Inspection of anchors cast in concrete.		X	ACI 318: D.9.2	
4. Inspection of anchors post-installed in hardened concrete members <sup>b</sup> .				
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.	X		ACI 318: D.9.2.4	
b. Mechanical anchors and adhesive anchors not defined in 4a.		X	ACI 318: D.9.2	

a. Where applicable, see also Section 1705.11, Special inspections for seismic resistance.

#### NEW SECTION

### WAC 51-50-1710 Section 1710--Preconstruction load tests.

1710.5 Exterior window and door assemblies. The design pressure rating of exterior windows and doors in buildings shall be determined in accordance with Section 1710.5.1 or 1710.5.2.

#### **EXCEPTIONS:**

- 1. Structural wind load design pressures for window units smaller than the size tested in accordance with Section 1710.5.1 or 1710.5.2 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.
- 2. Custom exterior windows and doors manufactured by a small business shall be exempt from all testing requirements in Section 1710 of the International Building Code provided they meet the applicable provisions of Chapter 24 of the International Building Code.

b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with D.9.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-1715 Section 1715--((Preconstruction load tests.)) Reserved.

((1715.5 Exterior window and door assemblies. The design pressure rating of exterior windows and doors in buildings shall be determined in accordance with Section 1715.5.1 or 1715.5.2.

#### **EXCEPTIONS**

1. Structural wind load design pressures for window units smaller than the size tested in accordance with Section 1715.5.1 or 1715.5.2 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.

2. Custom exterior windows and doors manufactured by a small business shall be exempt from all testing requirements in Section 1715 of the International Building Code provided they meet the applicable provisions of Chapter 24 of the International Building Code.))

### NEW SECTION

WAC 51-50-1901 Section 1901--General.

1901.2.1 Anchoring to concrete. Anchoring to concrete shall be in accordance with ACI 318 as amended in Section 1905, and applies to cast-in (headed bolts, headed studs, and hooked J- or L-bolts) anchors and post-installed expansion (torque-controlled and displacement-controlled), undercut, and adhesive anchors.

### NEW SECTION

WAC 51-50-1903 Section 1903--Specifications for tests and materials.

1903.1 General. Materials used to produce concrete, concrete itself and testing thereof shall comply with the applicable standards listed in ACI 318 where required, special inspections and tests shall be in accordance with Chapter 17.

EXCEPTION: The following standards as referenced in Chapter 35 shall be permitted to be used.

1. ASTM C 150 2. ASTM C 595 3. ASTM C 1157

#### NEW SECTION

# WAC 51-50-1904 Section 1904--Durability requirements.

1904.1 Structural concrete. Structural concrete shall conform to the durability requirements of ACI 318.

EXCEPTION:

For Group R-2 and R-3 occupancies not more than three stories above grade plane, the specified compressive strength,  $f_c$ , for concrete in basement walls, foundation walls, exterior walls and other vertical surfaces exposed to the weather shall be not less than 3000 psi.

1904.2 Nonstructural concrete. The registered design professional shall assign nonstructural concrete a freeze-thaw exposure class, as defined in ACI 318, based on the anticipated exposure of nonstructural concrete. Nonstructural concrete shall have a minimum specified compressive strength,  $f'_{c}$ , of 2500 psi for Class F0; 3000 psi for Class F1; and 3500 psi for Classes F2 and F3. Nonstructural concrete shall be air entrained in accordance with ACI 318.

#### NEW SECTION

#### WAC 51-50-1905 Section 1905--Modifications to ACI 318.

1905.1 General. The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through 1905.1.10.

WALL PIER. This definition is not adopted.

(Other definition remains unchanged)

- 1905.1.3 ACI 318, Section 21.4. Modify ACI 318, Section 21.4, by adding new Section 21.4.3 and renumbering existing Section 21.4.3 to become 21.4.4.
- 21.4.3 Connections that are designed to yield shall be capable of maintaining 80 percent of their design strength at the deformation induced by the design displacement or shall use Type 2 mechanical splices.
- 21.4.4 Elements of the connection that are not designed to yield shall develop at least 1.5 Sy.
- 1905.1.4 ACI 318, Section 21.9. This section is not adopted.
- 1905.1.9 ACI 318, Section D.3.3.

# Modify ACI 318 Sections D.3.3.4.2 and D.3.3.5.2 to read as follows:

D.3.3.4.2 - Where the tensile component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor tensile force associated with the same load combination, anchors and their attachments shall be designed in accordance with D.3.3.4.3. The anchor design tensile strength shall be determined in accordance with D.3.3.4.4.

#### EXCEPTIONS:

- 1. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 need not satisfy Section D.3.3.4.3.
- 2. Anchors in concrete designed to support nonstructural components in accordance with ASCE 7 Section 13.4.2 need not satisfy Section D.3.3.4.3.

D.3.3.5.2 - Where the shear component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor shear force associated with the same load combination, anchors and their attachments shall be designed in accordance with D.3.3.5.3. The anchor design shear strength for resisting earthquake forces shall be determined in accordance with D.6.

#### EXCEPTIONS:

- $1.\ D.3.3.5.3$  need not apply and the design shear strength in accordance with D.6.2.1(c) need not be computed for anchor bolts attaching wood sill plates of bearing or nonbearing walls of light-frame wood structures to foundations or foundation stem walls provided all of the following are satisfied:
- 1.1. The allowable in-plane shear strength of the anchor is determined in accordance with AF&PANDS Table 11E for lateral design values parallel to grain.
- 1.2. The maximum anchor nominal diameter is 5/8 inches (16 mm).
- 1.3. Anchor bolts are embedded into concrete a minimum of 7 inches (178 mm).
- 1.4. Anchor bolts are located a minimum of 1 3/4 inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate.
- 1.5. Anchor bolts are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.
- 1.6. The sill plate is 2-inch or 3-inch nominal thickness.
- 2. Section D.3.3.5.3 need not apply and the design shear strength in accordance with Section D.6.2.1(c) need not be computed for anchor bolts attaching cold-formed steel track of bearing or nonbearing walls of light-frame construction to foundations or foundation stem walls provided all of the following are satisfied:
- 2.1. The maximum anchor nominal diameter is 5/8 inches (16 mm).
- 2.2. Anchors are embedded into concrete a minimum of 7 inches (178 mm).
- 2.3. Anchors are located a minimum of 1 3/4 inches (45 mm) from the edge of the concrete parallel to the length of the track.
- 2.4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the track.
- 2.5. The track is 33 to 68 mil designation thickness.
- Allowable in-plane shear strength of exempt anchors, parallel to the edge of concrete shall be permitted to be determined in accordance with AISI S100 Section E3.3.1.
- 3. Anchors in concrete designed to support nonstructural components in accordance with ASCE 7 Section 13.4.2 need not satisfy Section D.3.3.5.3.
- 4. In light-frame construction, bearing or nonbearing walls, shear strength of concrete anchors less than or equal to 1 inch (25 mm) in diameter connecting sill plate or track to foundation or foundation stem wall need not satisfy D.3.3.5.3 when the design strength of the anchors is determined in accordance with D.6.2.1(c).

# 1905.1.10 ACI 318, Section D.4.2.2. Delete ACI 318, Section D.4.2.2, and replace with the following:

D.4.2.2 - For anchors with diameters not exceeding 4 in., the concrete breakout strength requirements shall be considered satisfied by the design procedure of D.5.2 and D.6.2. For anchors in shear with diameters exceeding 4 inches, shear anchor reinforcement shall be provided in accordance with the procedures of D.6.2.9.

# NEW SECTION

WAC 51-50-1908 Section 1908--Anchorage to concrete--Allowable stress design. This section is not adopted.

# NEW SECTION

WAC 51-50-1909 Section 1909--Anchorage to concrete--Strength design. This section is not adopted.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-2104 Section 2104--((Construction.)) Reserved.

((2104.1 Masonry construction. Masonry construction shall comply with the requirements of Sections 2104.1.1 through 2104.6 and with TMS 602/ACI 530.1/ASCE 6 except as modified by Sections 2104.5 and 2104.6.

# 2104.5 TMS 602/ACI 530.1/ASCE 6, Article 3.5 D, grout lift heights. Modify items 1.b, 1.c, and 2.b of Article 3.5 D as follows:

3.5 D.1.b When the conditions of Articles 3.5 D.1.a.i and 3.5 D.1.a.ii are met but there are intermediate bond beams within the grout pour, limit the grout lift height to the bottom of the lowest bond beam that is more than 5.33 ft. (1.63 m) above the bottom of the lift, but do not exceed a grout lift height of 12.67 ft. (3.86 m)

3.5 D.1.c When the conditions of Article 3.5 D.1.a.i or Article 3.5 D.1.a.ii are not met, place grout in lifts not exceeding 5.33 ft. (1.63 m).

3.5 D.2.b When placed in masonry that has not cured for at least 4 hours, place in lifts not exceeding 5.33 ft. (1.63 m).

# 2104.6 TMS 602/ACI 530.1/ASCE 6, Article 3.2F, cleanouts. Modify the first sentence of Article 3.2F as follows:

Provide cleanouts in the bottom course of masonry for each grout pour when the grout pour height exceeds 5.33 ft. (1.63 m).))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

#### WAC 51-50-21070 Section 2107--Allowable stress design.

**2107.1 General.** The design of masonry structures using *allowable stress design* shall comply with Sections 2106, 2107.2 and the requirements of Chapters 1 and 2 of TMS 402/ACI 530/ASCE 5 except as modified by Sections ((2107.3)) 2107.2 through 2107.5.

((2107.2 Load combinations. Structures and portions thereof shall be designed to resist the most critical effects resulting from the

load combinations of Section 1605.3. When using the alternative load combinations of Section 1605.3.2 that include wind or seismic loads, allowable stresses are permitted to be increased by one-third.

2107.6 TMS 402/ACI 530/ASCE 5, Section 1.16.1 anchor bolts. Modify the second paragraph of Section 1.16.1 as follows: Anchor bolts placed in the top of grouted cells and bond beams shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the bolts and the masonry unit or 1/2 inch (12.7 mm) of coarse grout between the bolts and the masonry unit. Anchor bolts placed in drilled holes in the face shells of hollow masonry units shall be permitted to contact the masonry unit where the bolt passes through the face shell, but the portion of the bolt that is within the grouted cell shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the head or bent leg of the bolt and the masonry unit.))

2107.2 TMS 402/ACI 530/ASCE 5, Section 2.1.8.7.1.1, lap splices. In lieu of Section 2.1.8.7.1.1, it shall be permitted to design lap splices in accordance with Section 2107.2.1.

**2107.2.1 Lap splices.** The minimum length of lap splices for reinforcing bars in tension or compression,  $l_a$ , shall be  $l_a = 0.002d_b$   $f_a$  (Equation 21-1)

For SI:  $\underline{l}_d = \underline{0.29d_b f_s}$ 

but not less than 12 inches (305 mm). In no case shall the length of the lapped splice be less than 40 bar diameters.

where:

 $\underline{d}_b \equiv \underline{\text{Diameter of reinforcement, inches (mm)}}.$   $\underline{f}_s \equiv \underline{\text{Computed stress in reinforcement due to design loads, psi (MPa)}}.$ 

In regions of moment where the design tensile stresses in the reinforcement are greater than 80 percent of the allowable steel tension stress,  $F_{\rm s}$ , the lap length of splices shall be increased not less than 50 percent of the minimum required length, but need not be greater than  $72d_{\rm s}$ . Other equivalent means of stress transfer to accomplish the same 50 percent increase shall be permitted. Where epoxy coated bars are used, lap length shall be increased by 50 percent.

- 2107.5 TMS 402/ACI 530/ASCE 5. Modify Section 2.3.4 Axial compression and flexure, as follows:
- 2.3.4.2.1 The compressive force in reinforced masonry due to axial load only shall be permitted to not exceed that given by Equation 2-21 or Equation 2-22.
  - (a) For members having an h/r ratio not greater than 99:
    - $P_a = (0.33 f' mAn + 0.65A_{st}F_s) [1- (Equation 2-21) (h/140r)^2]$

(b) For members having an h/r ratio not greater than 99:

 $P_a = (0.33 f' mAn + 0.65 F_s A_{st}) (70 r/h)^2$  (Equation 2-22)

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-2108 Section 2108--((Strength design of masonry.))
Reserved.

((2108.4 TMS 402/ACI 530/ASCE 5, Section 3.1.6. Modify Section 3.1.6 as follows:

3.1.6 Headed and bent-bar anchor bolts. All embedded bolts shall be grouted in place, except that 1/4 inch (6.4 mm) diameter bolts are permitted to be placed in bed joints that are at least 1/2 inch (12.7 mm) in thickness.

2108.5 TMS 402/ACI 530/ASCE 5, Section 1.16.1 anchor bolts. Modify the second paragraph of Section 1.16.1 as follows: Anchor bolts placed in the top of grouted cells and bond beams shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the bolts and the masonry unit or 1/2 inch (12.7 mm) of coarse grout between the bolts and the masonry unit. Anchor bolts placed in drilled holes in the face shells of hollow masonry units shall be permitted to contact the masonry unit where the bolt passes through the face shell, but the portion of the bolt that is within the grouted cell shall be positioned to maintain a minimum of 1/4 inch (6.4 mm) of fine grout between the head or bent leg of the bolt and the masonry unit.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-2111 Section 2111--Masonry fireplaces.

- **2111.7 Fireplaces.** Fireplaces shall be provided with each of the following:
- 1. Tightly fitting flue dampers, operated by a readily accessible manual or approved automatic control.

EXCEPTION:

Fireplaces with gas logs shall be installed in accordance with the International Mechanical Code Section 901, except that the standards for liquefied petroleum gas installations shall be NFPA 58 (Liquefied Petroleum Gas Code) and NFPA 54 (National Fuel Gas Code).

2. An outside source for combustion air ducted into the

firebox. The duct shall be at least 6 square inches, and shall be provided with an operable outside air duct damper.

EXCEPTION:

Washington certified fireplaces shall be installed with the combustion air systems necessary for their safe and efficient combustion and specified by the manufacturer in accordance with ((the Washington State Building Standard 31-2 (WAC 51-50-31200) and)) IBC Section 2114 (WAC 51-50-2114).

- 3. Site built fireplaces shall have tight fitting glass or metal doors, or a flue draft induction fan or as approved for minimizing back-drafting. Factory built fireplaces shall use doors listed for the installed appliance.
- 2111.7.1 Lintel and throat. Masonry over a fireplace opening shall be supported by a lintel of noncombustible material. The minimum required bearing length on each end of the fireplace opening shall be 4 inches (102 mm). The fireplace throat or damper shall be located a minimum of 8 inches (203 mm) above the top of the fireplace opening.

AMENDATORY SECTION (Amending WSR 04-01-108, filed 12/17/03, effective 7/1/04)

#### WAC 51-50-2114 Section 2114--Emission standards.

2114.1 Emission Standards for Factory-built Fireplaces. ((After January 1, 1997,)) No new or used factory-built fireplace shall be installed in Washington state unless it is certified and labeled in accordance with procedures and criteria specified in ((the Washington State Building Code Standard 31-2)) ASTM E2558 Standard Test Method for determining particulate matter emission from fires in low mass wood burning fireplaces.

To certify an entire fireplace model line, the internal assembly shall be tested to determine its particulate matter emission performance. Retesting and recertifying is required if the design and construction specifications of the fireplace model line internal assembly change. Testing for certification shall be performed by a Washington state department of ecology (DOE) approved and U.S. Environmental Protection Agency (EPA) accredited laboratory.

2114.2 Emission Standards for Certified Masonry and Concrete Fireplaces. ((After January 1, 1997, new certified masonry or concrete fireplaces installed in Washington state shall be tested and labeled in accordance with procedures and criteria specified in the Washington State Building Code Standard 31-2.

To certify an entire fireplace model line, the internal assembly shall be tested to determine its particulate matter emission performance. Retesting and recertifying is required if the design and construction specifications of the fireplace model line internal assembly change. Testing for certification shall be performed by a Washington state department of ecology (DOE) approved and U.S. Environmental Protection Agency (EPA) accredited

laboratory.)) Masonry and concrete fireplace model lines certified to Washington State Building Code Standard 31-2 prior to July 1, 2013, may retain certification provided the design and construction specifications of the fireplace model line internal assembly do not change.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-2900 Chapter 29--(( $\frac{Minimum}{Minimum}$ )) Plumbing (( $\frac{fixtures}{minimum}$ )) systems.

SECTION 2901--GENERAL.

- 2901.1 Scope. The provisions of this chapter and the state plumbing code shall ((apply to the number of plumbing fixtures and sanitation facilities to be provided in an occupancy regulated by this Code)) govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment and systems. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the state plumbing code.
- 2901.2 ((Minimum requirements. Plumbing fixtures and sanitation facilities shall be provided in the minimum number shown in Table 2902.1 and in this chapter. Where the proposed occupancy is not listed in Table 2902.1, the building official shall determine the fixture and facility requirements based on the occupancy which most nearly resembles the proposed occupancy. The number of occupants used for determining minimum fixtures and facilities shall be computed at the rate of one occupant per unit of net floor area as prescribed in Table 2902.1.

Plumbing fixtures need not be provided for unoccupied buildings or facilities.)) Health codes. In food preparation, serving and related storage areas, additional fixture requirements may be dictated by health codes.

# SECTION 2902--((FIXTURES)) MINIMUM PLUMBING FACILITIES.

- 2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be determined individually by the building official based on the occupancy which most nearly resembles the proposed occupancy. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3. Plumbing fixtures need not be provided for unoccupied buildings or facilities.
- 2902.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To

determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

EXCEPTION:

The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.

- ((2902.1.1)) <u>2902.1.1.1</u> **Private offices**. Fixtures only accessible to private offices shall not be counted to determine compliance with this section.
- 2902.1.1.2 Urinals. Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one quarter (25%) of the minimum specified. For men's facilities serving 26 or more persons, not less than one urinal shall be provided.
- 2902.1.2 ((Occupancy load distribution. The occupant load shall be divided equally between the sexes, unless data approved by the building official indicates a different distribution of the sexes.
- 2902.1.3 Food preparation areas. In food preparation, serving and related storage areas, additional fixture requirements may be dictated by health codes.
- 2902.1.4 Other requirements. For other requirements for plumbing facilities, see Section 1210 and Chapter 11.)) Family or assisted—use toilet and bath fixtures. Fixtures located within family or assisted—use toilet and bathing rooms required by Section 1109.2.1 are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile occupancies.
- 2902.2 ((Access to fixtures.)) Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

EXCEPTIONS:

- 1. Separate facilities shall not be required for dwelling units and sleeping units.
- 2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 15 or less.
- 3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
- 2902.2.1 ((Location. Plumbing fixtures shall be located in each building or conveniently in a building adjacent thereto on the same property.
- 2902.2.1.1 Toilet rooms. Toilet rooms shall not open directly into a room used for the preparation of food for service to the public or residents of Group R-2 boarding homes and residential treatment facilities licensed by Washington state.
- 2902.2.2 Multiple tenants. Access to toilets serving multiple tenants shall be through a common use area and not through an area

controlled by a tenant.

2902.2.3 Multistory buildings. Required fixtures shall not be located more than one vertical story above or below the area served.

#### **SECTION 2903--FACILITIES.**

## 2903.3 Facilities.

2903.3.1 Requirements. Separate toilet facilities shall be provided for each sex.

EXCEPTION: In occupancies serving 15 or fewer persons, one toilet facility designed for use by no more than one person at a time shall be permitted for use by both sexes.

2903.3.2 Food service establishments. When customers and employees share the same toilet rooms, customer access to the to the toilet rooms shall not pass through food preparation and unpackaged food storage areas.

2903.4 Pay facilities. Required facilities shall be free of charge. Where pay facilities are installed, they shall be in addition to the minimum required facilities.

2903.5 is not adopted.

#### SECTION 2904--SPECIAL PROVISIONS.

2904.1 Dwelling units. Dwelling units shall be provided with a kitchen sink.

2904.2 Water closet space requirements. The water closet stool in all occupancies shall be located in a clear space not less than 30 inches (762 mm) in width, with a clear space in front of the stool of not less than 24 inches (610 mm).

2904.3 Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.

#### 2904.4 Drinking fountains.

**2904.4.1 Number.** Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.

EXCEPTIONS:

1. Sporting facilities with concessions serving drinks shall have one drinking fountain for each 1000 occupants.

2. A drinking fountain need not be provided in a drinking or dining establishment.

2904.4.2 Multistory buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.

2904.4.3 Penal institutions. Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.

2904.4.4 Location. Drinking fountains shall not be located in toilet rooms.

# TABLE 2902.1--MINIMUM PLUMBING FIXTURES<sup>1,2,4,6</sup>

	WATER CLOSETS		<del>LAVA'</del>	TORIES <sup>5</sup>	
TYPE OF BUILDING OR	<del>(fixtures p</del>	<del>per person)</del>	(fixtures	<del>per person)</del>	BATHTUB OR SHOWER
OCCUPANCY <sup>8</sup>	MALE <sup>3</sup>	<b>FEMALE</b>	MALE	<b>FEMALE</b>	(fixtures per person)
For the occupancies listed to plumbing fixtures.	oelow, use 30 s	quare feet (2.7	<del>'9 m²) per occi</del>	upant for the mi	inimum number of
Group A Assembly places					
· -	<del>1:1-25</del>	<del>1:1-25</del>	One per 2 w		
Conference rooms, dining rooms, drinking			One per 2 w	ater closets	
establishments, exhibit	<del>2:26-75</del>	<del>2:26-75</del>			
rooms, gymnasiums,	<del>3:76-125</del>	<del>3:76-125</del>			
lounges, stages and	<del>4:126-200</del>	<del>4:126-200</del>			
similar uses including	<del>5:201-300</del>	<del>5:201-300</del>			
restaurants classified as	<del>6:301-400</del>	<del>6:301-400</del>			
Group B Occupancies	Over 400, ad for each addi males or 150				
For the assembly occupanci					
provided, use 15 square fee	T			*	<del>bing fixtures.</del>
Assembly places9 Theaters, auditoriums,	<del>1:1-100</del>	One per 25	<del>1:1-200</del>	<del>1:1-200</del>	
convention halls, dance floors, lodge rooms,	<del>2:101-200</del>	Up to 400	<del>2:201-400</del>	<del>2:201-400</del>	
casinos, and such places which have limited time	<del>3:201-400</del>		<del>3:401-750</del>	<del>3:401-750</del>	
for fixture use (intermissions)	Over 400, add one fixture for each additional 250 males or 50 females		Over 750, as for each add	dd one fixture litional 500	
Assembly places	1:1-100	One per 50	1:1-200	1:1-200	
Stadiums, arena and other	2:101-200	-	2:201-400	2:201-400	
sporting facilities where		Up to 400			
fixture use is not limited	<del>3:201-400</del>		<del>3:401-750</del>	<del>3:401-750</del>	
to intermissions	for each addi		for each add	dd one fixture litional 500	
	males or 100		persons		
For the assembly occupance provided, use 30 square fee					
Worship places					
Principal assembly area	<del>One per</del> <del>150</del>	One per 75	<del>One per 2 w</del>	vater closets	
Educational & activity unit	<del>One per</del> <del>125</del>	One per 75	One per 2 w	vater closets	
For the occupancies listed by	below, use 200	square feet (1	8.58 m²) per o	ccupant for the	minimum number of
<del>plumbing fixtures.</del>	T		1		
Group B	<del>1:1-15</del>	<del>1:1-15</del>	One per 2 w	vater closets	
and other clerical or	<del>2:16-35</del>	<del>2:16-35</del>			
administrative employee accessory use	<del>3:36-55</del>	<del>3:36-55</del>			
accessory ase	Over 55, add				
	persons				

	WATER-	<del>CLOSETS</del>	LAVA	FORIES <sup>5</sup>	
TYPE OF BUILDING OR	<del>(fixtures p</del>	<del>oer person)</del>	(fixtures p	<del>per person)</del>	BATHTUB OR SHOWER
OCCUPANCY <sup>8</sup>	MALE <sup>3</sup>	<b>FEMALE</b>	MALE	<b>FEMALE</b>	(fixtures per person)
For the occupancies listed by fixtures:	elow, use 100	square feet (9	<del>'.3 m²) per stud</del>	dent for the mir	nimum number of plumbing
Group E	<del>1:1-15</del>	<del>1:1-15</del>	One per 2 w	ater closets	
Schools - for staff use	<del>2:16-35</del>	<del>2:16-35</del>	_		
All schools	<del>3:36-55</del>	<del>3:36-55</del>			
(One staff per 20 students)	Over 55, add for each add persons				
Schools - for student use	<del>1:1-20</del>	<del>1:1-20</del>	<del>1:1-20</del>	<del>1:1-20</del>	
<del>Day care</del>	<del>2:21-50</del>	<del>2:21-50</del>	<del>2:21-50</del>	<del>2:21-50</del>	
	Over 50, add for each add persons		Over 50, add for each add persons		
Elementary	One per 30	One per 25	One per 2 w	ater closets	
Secondary	One per 40	One per 30	One per 2 w	ater closets	
For the occupancies listed to plumbing fixtures.	<del>selow, use 50 s</del>	quare feet (4.6	<del>i5 m²) per occu</del>	apant for the mi	inimum number of
Education facilities other than Group E Others (colleges, universities, adult centers, etc.)	One per 40	One per 25	One per 2 w	ater closets	
For the occupancies listed by plumbing fixtures.	<del>selow, use 2,00</del>	<del>00 square feet (</del>	(185.8 m²) per	occupant for th	ne minimum number of
Group F and Group II	<del>1:1-10</del>	<del>1:1-10</del>	One per 2 w	ater closets	
Workshop, foundries and	<del>2:11-25</del>	<del>2:11-25</del>	1		One shower for each 15
similar establishments, and hazardous occupancies	<del>3:26-50</del>	<del>3:26-50</del>			persons exposed to excessive heat or to skin contamination with irritating materials
	<del>4:51-75</del>	<del>4:51-75</del>			
	<del>5:76-100</del>	<del>5:76-100</del>			
	for each add persons	ld one fixture itional 30			
For the occupancies listed to the general use area for the				00 square feet (	18.58 m²) per occupant of
Group I <sup>7</sup>					
Hospital waiting rooms	One per roor either sex)	<del>n (usable by</del>	One per root	m	
Hospital general use areas	<del>1:1-15</del>	<del>1:1-15</del>	One per 2 w	ater closets	
	<del>2:16-35</del>	<del>3:16-35</del>			
	<del>3:36-55</del>	<del>3:36-55</del>			
	Over 55, add for each add persons				

	WATER-	CLOSETS	LAVAT	ORIES <sup>5</sup>				
TYPE OF BUILDING OR	<del>(fixtures p</del>	<del>oer person)</del>	(fixtures p	<del>oer person)</del>	BATHTUB OR SHOWER			
OCCUPANCY <sup>8</sup>	MALE <sup>3</sup>	FEMALE	MALE	<b>FEMALE</b>	(fixtures per person)			
Hospital patient rooms:								
Single Bed	One adjacen		One per toile	<del>et room</del>	One per toilet room			
<del>Isolation</del>	One adjacen	t to and	One per toile	<del>et room</del>	One per toilet room			
Multibed	One per 4 pa	tients	One per 4 pa	tients	One per 8 patients			
<del>Long-term</del>	One per 4 pa	tients	One per 4 pa	<del>itients</del>	One per 15 patients			
Jails and reformatories								
Cell	One per cell		One per cell					
Exercise room	One per exer	cise room	One per exer	cise room				
Other institutions (on	One per 25	One per 25	One per 2 wa	ater closets	One per 8			
each occupied floor)	_	-	-		-			
For the occupancies listed by plumbing fixtures.	below, use 200	square feet (1	8.58 m²) per oo	ecupant for the	minimum number of			
Group M								
Retail or wholesale stores	<del>1:1-50</del>	<del>1:1-50</del>	One per 2 wa	ater closets				
	<del>2:51-100</del>	<del>2:51-100</del>	1					
	<del>3:101-400</del>	<del>3:101-200</del>						
		<del>4:201-300</del>						
		<del>5:301-400</del>						
	Over 400, ac for each add males or 150							
For Group R Occupancies of 200 square feet (18.58 m²)								
Group R		or the minimum	number of pr	unionig fixture	-3·			
Dwelling units	One per dwe	llingunit	One per dwe	lling unit	One per dwelling unit			
_	-	_	-	_	One per guest room			
Hotel, motel, and boarding house guest rooms	One per gues	St 100III	One per gues	St 100III	One per guest room			
Boarding homes licensed by the department of social and health services	One per 8	One per 8	One per 8	One per 8	One per 12			
Dormitories	One per 10	One per 8	One per 12	One per 12	One per 8			
	Over 10, add for each add males and ov one for each 20 females	itional 25 ver 8, add	Over 12, add one fixture for each additional 20 males and one for each additional 15 females		For females, add one additional unit per each additional 30. Over 150 persons, add one additional unit per each additional 20 persons			
For the occupancies listed below, use 5,000 square feet (464.5 m²) per occupant for the minimum number of plumbing fixtures.								

TYPE OF BUILDING OR OCCUPANCY*	WATER CLOSETS (fixtures per person) MALE <sup>†</sup> FEMALE			FORIES <sup>5</sup> per person) FEMALE	BATHTUB OR SHOWER  (fixtures per person)	
Group S	<del>1:1-10</del>	1:1-10	One per 40 occupants of each sex		One shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or	
Warehouses	2:11-25 3:26-50 4:51-75 5:76-100 Over 100, aceach 30 pers				irritating materials	

<sup>&</sup>lt;sup>t</sup>The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.

Family or assisted-use toilet facilities serving as separate facilities. Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family/assisted-use toilet facilities shall be permitted to serve as the required separate facilities. Family or assisted-use toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 2902.4.

2902.3 Employee and public toilet facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 2902.1 for all users. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall either be separate or combined employee and public toilet facilities.

**EXCEPTION:** 

<u>Public toilet facilities shall not be required in open or enclosed parking garages. Toilet facilities shall not be required in parking garages where there are no parking attendants.</u>

2902.3.1 Access. The route to the public toilet facilities required by Section 2902.3 shall not pass through kitchens, food preparation areas, unpackaged food storage areas, storage rooms or closets. Access to the required facilities shall be from within the building or from the exterior of the building. Access to toilets serving multiple tenants shall be through a common use area and not through an area controlled by a tenant. All routes shall

<sup>&</sup>lt;sup>2</sup>For occupancies not shown, see Section 2901.2.

<sup>&</sup>lt;sup>3</sup>Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one quarter (25%) of the minimum specified. For men's facilities serving 26 or more persons, not less than one urinal shall be provided.

<sup>&</sup>lt;sup>4</sup>For drinking fountains, see Section 2904.4.

<sup>&</sup>lt;sup>5</sup>Twenty four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.

<sup>&</sup>lt;sup>6</sup>For when a facility may be usable by either sex, see Section 2903.3.1.

<sup>&</sup>lt;sup>7</sup>See WAC 246 320 for definitions, other fixtures and equipment for hospitals.

<sup>\*</sup>When a space is accessory to or included as a part of a different occupancy group per Chapter 3, the area per occupant for the minimum plumbing fixture number is to be determined by its own specific use or purpose, not by that of the building's occupancy group.

In multiplex movie theaters, where shows are scheduled at different times, the number of occupants for toilet fixture use may be based upon one-half (50%) of the total in all the auditoriums, but no less than the number in the largest auditorium.))

- comply with the accessibility requirements of this code. The public shall have access to the required toilet facilities at all times that the building is occupied. For other requirements for plumbing facilities, see Chapter 11.
- 2902.3.1.1 Food preparation areas. Toilet rooms shall not open directly into a room used for the preparation of food for service to the public or residents of Group R-2 boarding homes and residential treatment facilities licensed by Washington state.
- 2902.3.2 Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located in each building not more than one story above or below the space required to be provided with toilet facilities, or conveniently in a building adjacent thereto on the same property, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

EXCEPTION:

The location and maximum travel distances to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.

- 2902.3.3 Location of toilet facilities in malls. In covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 300 feet (91,440 mm). In mall buildings, the required facilities shall be based on total square footage (m2) within a covered mall building or within the perimeter line of an open mall building, and facilities shall be installed in each individual store or in a central toilet area located in accordance with this section. The maximum travel distance to central toilet facilities in mall buildings shall be measured from the main entrance of any store or tenant space. In mall buildings, where employees' toilet facilities are not provided in the individual store, the maximum travel distance shall be measured from the employees' work area of the store or tenant space.
- 2902.3.4 Pay facilities. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities. Required facilities shall be free of charge.
- 2902.3.5 Door locking. Where a toilet room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use toilet rooms.
- 2902.4 Signage. Required public facilities shall be designated by a legible sign for each sex. Signs shall be readily visible and located near the entrance to each toilet facility. Signs for accessible toilet facilities shall comply with Section 1110.
- 2902.4.1 Directional signage. Directional signage indicating the route to the public facilities shall be posted in accordance with Section 3107. Such signage shall be located in a corridor or

- <u>aisle</u>, at the entrance to the facilities for customers and visitors.
- 2902.5 Drinking fountain location. Drinking fountains shall not be required to be located in individual tenant spaces provided that public drinking fountains are located within a travel distance of 500 feet of the most remote location in the tenant space and not more than one story above or below the tenant space. Where the tenant space is in a covered or open mall, such distance shall not exceed 300 feet. Drinking fountains shall be located on an accessible route. Drinking fountains shall not be located in toilet rooms.
- <u>2902.5.1 Drinking fountain number.</u> Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.

EXCEPTIONS:

1. Sporting facilities with concessions serving drinks shall have one drinking fountain for each 1000 occupants.

2. A drinking fountain need not be provided in a drinking or dining establishment.

- 2902.5.2 Multistory buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.
- <u>2902.5.3 Penal institutions.</u> Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.
- **2902.6 Dwelling units.** Dwelling units shall be provided with a kitchen sink.
- 2902.7 Water closet space requirements. The water closet stool in all occupancies shall be located in a clear space not less than 30 inches (762 mm) in width, with a clear space in front of the stool of not less than 24 inches (610 mm).
- 2902.8 Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.

SECTION 2903--RESERVED.

SECTION 2904--RESERVED.

# <u>Table 2902.1</u> <u>Minimum Number of Required Plumbing Fixtures</u> (See Sections 2902.2 and 2902.3)

				Water Closets		<u>Lavatories</u>		Bathtubs
<u>No.</u>	Classification	Occupancy	<u>Description</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	/Showers
1	<u>Assembly</u>	<u>A-1<sup>d</sup></u>	Theaters and other buildings for the performing arts and motion pictures	<u>1 per 125</u>	<u>1 per 65</u>	1 per 200		Ξ
		<u>A-2<sup>d</sup></u>	Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	<u>1 per 40</u>	<u>1 per 75</u>		П

				Water Closets		Lavatories		Bathtubs
<u>No.</u>	Classification	Occupancy	Description	Male	<u>Female</u>	Male	<u>Female</u>	/Showers
			Restaurants, banquet halls and food courts	<u>1 per 75</u>	<u>1 per 75</u>	1 per 200		=
		<u>A-3<sup>d</sup></u>	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	<u>1 per 125</u>	<u>1 per 65</u>	1 per 200		==
			Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750		<u>=</u> .
			Places of worship and other religious services	1 per 150	1 per 75	1 per 200		<u></u>
		<u>A-4</u>	Coliseums, arenas, skating rinks, pools, and tennis courts for indoor sporting events and activities	1 per 75 for first 1,500 and 1 per 120 for remainder exceeding 1,500	1 per 40 for first 1,520 and 1 per 60 for remainder exceeding 1,520	1 per 200	<u>1 per 150</u>	Ξ
		<u>A-5</u>	Stadiums amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for first 1,500 and 1 per 120 for remainder exceeding 1,500	1 per 40 for first 1,520 and 1 per 60 for remainder exceeding 1,520	1 per 200	<u>1 per 150</u>	=
2	Business	<u>B</u>	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for f per 50 for the exceeding 50	remainder		or first 80 and remainder 80	=
<u>3</u>	<u>Educational</u>	<u>E</u>	Educational facilities	1 per 50	1 per 30	<u>1 per</u> <u>100</u>	1 per 60	=
4	Factory and industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	<u>1 per 100</u>		1 per 100		Check State (UPC)
<u>5</u>	<u>Institutional</u>	<u>I-1</u> <u>I-2</u>	Residential care  Hospitals, ambulatory nursing home care recipient <sup>b</sup>	1 per 10 1 per room <sup>c</sup>		1 per 10 1 per room	<u></u>	1 per 8 1 per 15

				Water Closets		<u>Lavatories</u>		Bathtubs
No.	Classification	Occupancy Occupancy	<u>Description</u>	Male	<u>Female</u>	Male	Female	/Showers
			Employees, other than residential care <sup>b</sup>	<u>1 per 25</u>		<u>1 per 35</u>		=
			Visitors other than residential care	<u>1 per 75</u>	1 per 75			=
		<u>I-3</u>	<u>Prisons</u> <sup>b</sup>	1 per cell		1 per cell		<u>1 per 15</u>
			Reformatories, detention centers and correctional centers <sup>b</sup>	1 per 15				<u>1 per 15</u>
			Employees <sup>b</sup>	1 per 25		<u>1 per 35</u>		<u></u>
		<u>I-4</u>	Adult day care and child day care	<u>1 per 15</u>		1 per 15		1
<u>6</u>	Mercantile	<u>M</u>	Retail stores, service stations, shops, salesrooms, markets and shopping centers	<u>1 per 500</u>		<u>1 per 750</u>		=
7	Residential	<u>R-1</u>	Hotels, motels, boarding houses (transient)	1 per sleepin	1 per sleeping unit  1 per 10		ing unit	1 per sleeping unit
		<u>R-2</u>	Dormitories, fraternities, sororities and boarding houses (not transient)	<u>1 per 10</u>				<u>1 per 8</u>
			Apartment house	1 per dwellir	ng unit	1 per dwel	ling unit	1 per dwelling unit
		<u>R-3</u>	One- and two- family dwellings	1 per dwellir	ng unit	1 per 10		1 per dwelling unit
			Congregate living facilities with 16 or fewer persons	1 per 10	1 per 10  1 per 10			<u>1 per 8</u>
		<u>R-4</u>	Congregate living facilities with 16 or fewer persons	1 per 10				1 per 8
<u>8</u>	Storage	<u>S-1</u> <u>S-2</u>	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	<u>1 per 100</u>		<u>1 per 100</u>		Check State (UPC)

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall

be permitted where such room is provided with direct access from each patient sleeping unit and with provisions for privacy.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-3001 Reserved.

Section 3002--Hoistway enclosures.

3002.4 Elevator car to accommodate ambulance stretcher. In buildings four stories in height or more, and in buildings which are required to have an elevator and contain Group R-1, R-2 or I Occupancies on a level other than the exit discharge level, at least one elevator shall be provided for fire department emergency access to all floors. ((Such)) The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 2134 mm) ambulance stretcher with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) ((high)) in height and shall be placed inside on both sides of the hoistway door frame.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-3108 Section 3108--((Telecommunications and broadcast towers.)) Reserved.

((3108.1 General. Towers shall be designed and constructed in accordance with the provisions of TIA-222. In Section 2.6.6.2, the extent of Topographic Category 2, escarpments, shall extend 16 times the height of the escarpment. Towers shall be designed for seismic loads. The exceptions to the requirement of seismic design listed in Section 2.7.3 shall not apply. Class I structures per Table 2-1 of the standard may be exempted from seismic design, if approved by the building official.

EXCEPTION:

Single free-standing poles used to support antennas not greater than 75 feet (22,860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-3401 Section 3401--General.

**3401.5 Alternative compliance.** Work performed in accordance with the ((2009)) 2012 International Existing Building Code as amended

in WAC 51-50-480000 shall be deemed to comply with the provisions of this chapter.

3401.6 Dangerous conditions. The building official shall have the authority to require the elimination of conditions deemed dangerous.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-3411 Section 3411--Accessibility for existing buildings.

**3411.7 Alterations affecting an area containing a primary function.** Where an alteration affects the accessibility to, or contains an area of *primary function*, the route to the *primary function* area shall be accessible. The accessible route to the *primary function* area shall include toilet facilities, telephones or drinking fountains serving the area of *primary function*.

#### EXCEPTIONS:

- 1. The costs of providing the *accessible route* are not required to exceed 20 percent of the costs of the *alteration* affecting the area of *primary function*.
- 2. This provision does not apply to *alterations* limited solely to windows, hardware, operating controls, electrical outlets and signs.
- 3. This provision does not apply to *alterations* limited solely to mechanical systems, electrical systems, installation or *alteration* of fire protection systems and abatement of hazardous materials.
- 4. This provision does not apply to *alterations* undertaken for the primary purpose of increasing the accessibility of ((an existing building,)) a *facility* ((or element)).
- 5. This provision does not apply to altered areas limited to Type B dwellings and sleeping units.

**3411.8.11 Toilet rooms.** Where it is technically infeasible to alter existing toilet and bathing ((facilities)) rooms to be accessible, an accessible family or assisted use toilet or bathing ((facility)) room constructed in accordance with Section 1109.2.1 is permitted. The family or assisted—use ((facility)) toilet or bathing room shall be located on the same floor and in the same area as the existing ((facility)) toilet or bathing rooms. The number of toilet ((facilities)) or bathing rooms and water closets required by the State Building Code is permitted to be reduced by one, in order to provide accessible features.

#### NEW SECTION

WAC 51-50-3500 Chapter 35--Reference standards.

# Add new standards to Chapter 35:

#### **ASTM**

C150-12 Specification for Portland Cement.

C595-12 Specification for Blended Hydraulic Cement. C1157-11 Standard Performance Specification for Hydraulic Cement.

#### NFPA

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-480000 (( $\frac{2009}{}$ ))  $\underline{2012}$  International Existing Building Code.

# INTERNATIONAL EXISTING BUILDING CODE ((2009)) 2012 EDITION

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

## WAC 51-50-480101 Section 101--General.

- 101.4 Applicability. When requested by the permit applicant, this code shall apply to the repair, alteration, change of occupancy and relocation of buildings existing on the date of adoption of this code, regardless of occupancy, subject to the criteria of Sections 101.4.1 and 101.4.2. When compliance with this code has not been requested, compliance with the State Building Code as adopted in Title 51 WAC shall be demonstrated.
- 101.4.1 Buildings not previously occupied. A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the State Building Code adopted in Title 51 WAC, for new construction or with any current permit for such occupancy.
- 101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code, or as deemed necessary by the code official to mitigate an unsafe building. For

the purpose of this section, "unsafe building" is not to be construed as mere lack of compliance with the current code.

((101.7)) 101.6 Appendices. The code official is authorized to require rehabilitation and retrofit of buildings, structures, or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted. Appendix A, Guidelines for the Seismic Retrofit of Existing Buildings, is hereby adopted as part of this code without any specific adoption by the local jurisdiction.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-480102 Section 102--Applicability.

((102.4.1)) 102.4.1.1 Fire prevention. The provisions of the International Fire Code shall apply to matters affecting or relating to structures, processes and premises regarding: The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation except as specifically provided for in this Code.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-480307 Section 307--((Change of occupancy.)) Reserved.

(([B] 307.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the International Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of the International Building Code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. The hazard tables of Chapter 9 may be used to demonstrate the relative fire and life risk of the

existing and the new proposed uses.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480405 Section 405--((Alteration--Level 3.)) Reserved.

((405.1 Scope. Level 3 alterations apply where the work area exceeds 50% of the floor area of the building.))

# NEW SECTION

# WAC 51-50-480407 Change of occupancy.

407.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the International Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of the International Building Code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. The hazard tables of Chapter 10 may be used to demonstrate the relative fire and life risk of the existing and the new proposed uses.

#### NEW SECTION

# WAC 51-50-480505 Alteration--Level 3.

**505.1 Scope.** Level 3 alterations apply where the work area exceeds 50% of the floor area of the building.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-480607 Section 607--((Energy conservation.)) Reserved.

((607.1 Minimum requirements. Level 1 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).))

AMENDATORY SECTION (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480704 Section 704--((Fire protection.)) Reserved.

((704.1 Scope. The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

EXCEPTION:

For Level 2 alteration projects in which the fire protection requirements constitute an excessive burden, the fire protection requirements may be modified or waived by the fire code official.

704.2 Automatic sprinkler systems. Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 704.2.1 through 704.2.5. Installation requirements shall be in accordance with the International Fire Code and NFPA 13 or NFPA 13R.))

# NEW SECTION

WAC 51-50-480707 Energy conservation.

707.1 Minimum requirements. Level 1 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-480711 Section 711--((Energy conservation.))
Reserved.

((711.1 Minimum requirements. Level 2 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).))

#### NEW SECTION

# WAC 51-50-480804 Fire protection.

**804.1 Scope.** The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

EXCEPTION:

For Level 2 alteration projects in which the fire protection requirements constitute an excessive burden, the fire protection requirements may be modified or waived by the fire code official.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-480807 Section 807--((Structural.)) Reserved.

- ((807.4.1 Evaluation and analysis. An engineering evaluation and analysis that establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official. For structures assigned to Seismic Design Category D, the registered design professional shall submit to the code official a seismic evaluation report of the existing building based on one of the procedures specified in Section 101.5.4.2. This seismic evaluation report shall not be required for buildings in compliance with the benchmark building provisions of ASCE 31, Section 3.2.
- 807.4.2 Substantial structural alteration. Any building or structure undergoing substantial improvement shall have an evaluation and analysis to demonstrate that the altered building or structure complies with the *International Building Code* for wind loading and with reduced *International Building Code* level seismic forces as specified in Section 101.5.4.2 for seismic loading. For seismic considerations, the analysis shall be based on one of the procedures specified in Section 101.5.4.
- 807.4.3 Limited structural alteration. Where any building or structure undergoes less than substantial improvement, the evaluation and analysis shall demonstrate that the altered building or structure complies with the loads applicable at the time the building was constructed.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-480808 Section 808--((Energy conservation.)) Reserved.

((808.1 Minimum requirements. Level 3 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).)

# NEW SECTION

WAC 51-50-480811 Energy conservation.

**811.1 Minimum requirements.** Level 2 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

# NEW SECTION

WAC 51-50-480907 Structural.

907.4.1 Evaluation and analysis. An engineering evaluation and analysis that establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official. For structures assigned to Seismic Design Category D, the registered design professional shall submit to the code official a seismic evaluation report of the existing building based on one of the procedures specified in Section 301.1.4.2. This seismic evaluation report shall not be required for buildings in compliance with the benchmark building provisions of ASCE 31, Section 3.2.

# NEW SECTION

WAC 51-50-480908 Energy conservation.

**908.1 Minimum requirements.** Level 3 alterations to existing buildings or structures shall comply with the Washington State Energy Code (chapter 51-11 WAC).

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-480912 Section 912--((Change of occupancy classification.)) Reserved.

((912.1.1 Compliance with Chapter 8. The requirements of Chapter 8 shall be applicable throughout the building for the new occupancy classification based on the separation conditions set forth in Sections 912.1.1.1 and 912.1.1.2. All existing buildings with a change of occupancy classification shall comply with the seismic provisions of Section 907.3.))

#### NEW SECTION

WAC 51-50-481012 Change of occupancy classification.

1012.1.1 Compliance with Chapter 9. The requirements of Chapter 9 shall be applicable throughout the building for the new occupancy classification based on the separation conditions set forth in Sections 1012.1.1.1 and 1012.1.1.2. All existing buildings with a change of occupancy classification shall comply with the seismic provisions of Section 1007.3.

AMENDATORY SECTION (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

WAC 51-50-481101 Chapter 11--((Historic buildings--Section 1101--General.)) Reserved.

((1101.1 Scope. It is the intent of this chapter to provide means for the preservation of historic buildings as defined in Chapter 2. It is the purpose of this chapter to encourage cost-effective preservation of original or restored architectural elements and

features and to provide a historic building that will result in a reasonable degree of safety, based on accepted life and fire safety practices, compared to the existing building. Historical buildings shall comply with the provisions of this chapter relating to their repair, alteration, relocation and change of occupancy.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

# WAC 51-50-481103 Section 1103--((Fire safety.)) Reserved.

((1103.7 One-hour fire-resistant assemblies. Where one-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath or metal lath and plaster.))

1103.9 ((Stairway railings. Historically significant stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally dangerous.)) Reserved.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-481104 ((Alterations.)) Reserved.

((1104.1 Accessibility requirements. The provisions of Sections 605 and 706 shall apply to buildings and facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the professional responsible for the historical documentation of the project, the alternative requirements of Sections 1104.1.1 through 1104.1.4 for that element shall be permitted.))

<u>AMENDATORY SECTION</u> (Amending WSR 07-01-091, filed 12/19/06, effective 7/1/07)

WAC 51-50-481105 Section 1105--((Change of occupancy.))
Reserved.

((1105.10 One-hour fire-resistant assemblies. Where one-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath or metal lath and plaster.

1105.14 Natural light. When it is determined by the professional responsible for the historical documentation of the project that compliance with the natural light requirements of Section 911.1 will lead to loss of historic character or historic materials in the building, the existing level of natural lighting shall be considered acceptable.))

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-481201 Section 1201--Historic buildings--General.

((1201.1 Conformance. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the International Residential Code (chapter 51-51 WAC), the International Mechanical Code (chapter 51-52 WAC), the International Fire Code (chapter 51-54 WAC), the Uniform Plumbing Code and Standards (chapters 51-56 and 51-57 WAC), the Washington State Energy Code (chapter 51-11 WAC) and the Washington State Ventilation and Indoor Air Quality Code (chapter 51-13 WAC) for new buildings or structures.

EXCEPTION: Group R-3 buildings or structures are not required to comply if:

1. The original occupancy classification is not changed; and

2. The original building is not substantially remodeled or rehabilitated:

For the purposes of this section, a building shall be considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.))

1201.1 Scope. It is the intent of this chapter to provide means for the preservation of historic buildings as defined in Chapter 2. It is the purpose of this chapter to encourage cost-effective preservation of original or restored architectural elements and features and to provide a historic building that will result in a reasonable degree of safety, based on accepted life and fire safety practices, compared to the existing building. Historical buildings

shall comply with the provisions of this chapter relating to their repair, alteration, relocation and change of occupancy.

SECTION 1202--((REQUIREMENTS. This section not adopted.)) Reserved.

#### NEW SECTION

WAC 51-50-481203 Fire safety.

1203.9 Stairway railings. Historically significant stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally dangerous.

### NEW SECTION

WAC 51-50-481204 Alterations.

1204.1 Accessibility requirements. The provisions of Sections 705, 806, and 906, as applicable, shall apply to facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, entrances, or toilet rooms would threaten or destroy the historic significance of the building or facility, as determined by the professional responsible for the historical documentation of the project, the alternative requirements of Sections 1204.1.1 through 1204.1.4 for that element shall be permitted.

EXCEPTION:

Type B dwelling or sleeping units required by Section 1107 of the International Building Code are not required to be provided in historical buildings.

#### NEW SECTION

WAC 51-50-481205 Change of occupancy.

1205.10 One-hour fire-resistant assemblies. Where one-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath or metal lath and plaster.

1205.14 Natural light. When it is determined by the professional responsible for the historical documentation of the project that

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compliance with the natural light requirements of Section 1011.1 will lead to loss of historic character or historic materials in the building, the existing level of natural lighting shall be considered acceptable.

<u>AMENDATORY SECTION</u> (Amending WSR 10-03-097, filed 1/20/10, effective 7/1/10)

# WAC 51-50-481301 ((Reserved.)) Relocated or moved buildings--General.

1301.1 Conformance. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code, the International Residential Code (chapter 51-51 WAC), the International Mechanical Code (chapter 51-52 WAC), the International Fire Code (chapter 51-54 WAC), the Uniform Plumbing Code and Standards (chapters 51-56 and 51-57 WAC), the Washington State Energy Code (chapter 51-11 WAC) and the Washington State Ventilation and Indoor Air Quality Code (chapter 51-13 WAC) for new buildings or structures.

#### EXCEPTION:

Group R-3 buildings or structures are not required to comply if:

1. The original occupancy classification is not changed; and

2. The original building is not substantially remodeled or rehabilitated.

For the purposes of this section, a building shall be considered to be substantially remodeled when the costs of remodeling exceed 60 percent of the value of the building exclusive of the costs relating to preparation, construction, demolition or renovation of foundations.

#### NEW SECTION

WAC 51-50-481302 Requirements.

This section is not adopted.

## REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 51-50-31200

Section 31-2--Standard test method for particulate emissions from

fireplaces.